METHADONE SUBSTITUTION THERAPY

POLICIES AND PRACTICES

Edited by

Hamid Ghodse
Carmel Clancy
Adenekan Oyefeso
[prepared for the Internet by John Corkery]

European Collaborating Centres in Addiction Studies

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Foreword

A united Europe is quickly becoming a reality as national boundaries become less obvious. The changes over the past decade which include ease of border controls between European States, a European Parliament being given wider responsibilities and the recent move to have a single European Currency give support to this view. Naturally there are advantages and disadvantages to any change process. Within the field of drug trafficking, abuse and addiction, closer transnational co-operation and collaboration are essential and, if facilitated by such change, are especially welcome.

The phenomenon of substance misuse is global; it neither accepts nor respects national boundaries. Consequently no single approach can effectively halt the destruction and misery caused by the abuse of drugs. A successful strategy must include co-operation at a local, national and international level, involving every agency in the community. The desire to build on what has already been achieved and promote wider and deeper co-operation across Europe finds expression in the Treaty on European Union. In this Treaty the fight against drugs and drug dependence is specifically mentioned in the context of the provisions that have been introduced governing public health. The need for co-operation at the level of the Union has long been recognised, demonstrated by the prominent place occupied by drugs on the European Political agenda.

In 1992, ECCAS, the European Collaborating Centres in Addiction Studies, was formed. Its goal is to translate the beliefs and plans of the European Commission into practical co-operation and action. Groups such as ECCAS represent the next step in achieving wider and more effective strategies to combat drug abuse and dependence across Europe by facilitating co-operation and collaboration, resulting in the establishment of best practice.

ECCAS's aim is to promote in-depth understanding of substance misuse and its impact on the individual, his/her family and the wider community through appropriate scientific, clinical and social approaches and methods for dealing with it, with due respect to national policies and practices through a European multi-disciplinary group of professionals.

Since forming, ECCAS has carried out several pieces of work, including a transnational multi-centre study investigating the impact of methadone substitution therapy (MST) on illicit drug use and drug abuse-related quality of life. This monograph is a companion of that study. In order to know whether a treatment is effective or not, one needs to understand the process involved in providing that treatment. Methadone Substitution Therapy is a term or protocol often mentioned but not fully understood or indeed consistently offered in the same way. We trust that this monograph will add to the general understanding of MST programmes and, in particular, assist colleagues across Europe who are currently offering an MST programme or are planning to do so. No attempt is made to examine the appropriateness or otherwise of MST in different socio-cultural contexts. A drug abuse treatment programme might be a useful public health intervention and a very appropriate response in one country but not in another. The choice of a preferred treatment programme therefore must take many factors into consideration.

Professor Hamid Ghodse
ECCAS President

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Contents

Section I

Introduction

Chapter 1 Methadone Substitution Therapy (MST) - a response to opioid related problems

C Clancy, A Oyefeso, AH Ghodse & J Lind

Introduction

Methadone Substitution Therapy is a treatment for opiate addiction first reported by Dole & Nyswander in 1965. Methadone is a synthetic narcotic analgesic initially developed in Germany at the end of World War II. It was during the post-war period, following a number of studies, that it became apparent that methadone had a similar effect to morphine but was longer acting. This latter discovery became one of the main reasons for its popularity in the treatment of withdrawal from heroin.

Methadone is now commonly prescribed, with evidence suggesting an increasing acceptance of MST (Swiss Methadone Report, 1996). Over 200,000 patients in the European Union alone are receiving methadone treatment for opiate addiction (Watson 1997). Indeed, the availability of MST has increased over the past decade both in countries with a history of prescribing, such as the United Kingdom and Australia, as well as countries which have not endorsed substitute prescribing in the past. In spite of this, MST is still not a recognised treatment strategy in most countries of the world.

Although it was initially hypothesised that many heroin addicts undergo a permanent metabolic change that necessitates continued treatment with methadone for an indefinite period (Newman 1987), MST was primarily conceptualised as a withdrawal or detoxification regimen, e.g., Methadone Detoxification Treatment (MDT). This view has gradually shifted over the last two decades towards maintenance as the preferred treatment approach. The reasons for this are discussed later in this chapter.

Methadone Detoxification Treatment (MDT)

Ghodse (1995) has provided an extensive description of the structure and contents of MDT , which can be carried out in an in- patient, out- patient or day-patient/community setting. The first stage of treatment is referred to as 'stabilisation' and involves the patient undergoing a process resulting in an appropriate dose of methadone being prescribed. Out-patient stabilisation is effected with an increasing dose of methadone administered daily under supervision, followed by a period of observation to ensure no intoxication occurs. This procedure continues until the patient exhibits none of the signs or symptoms of opiate withdrawal. The dose given the day prior to the absence of withdrawal symptoms becomes the baseline dosage. Stabilisation in in-patient and day-patient settings occurs more quickly, as the patient is under continuous supervision.

Following stabilisation the patient is slowly detoxified by decreasing the daily doses of methadone to zero. The patient's needs, service policy and practice determine the duration of this process. In-patient detoxification, however, usually proceeds more quickly.

Methadone Maintenance Treatment (MDT)

In maintenance treatment , methadone is prescribed at a steady dose on a long-term basis in order to take advantage of its long half - life (24 - 36 hours after a single dose). This eliminates the need for multiple daily doses and normalises the adverse physiological processes experienced in heroin use.

At the beginning of treatment (i.e., the stabilisation stage) a patient may experience some drowsiness before achieving tolerance. Once maintained on an appropriate dose, however, the patient should experience neither euphoria nor withdrawal. Furthermore, the euphoric effect from street heroin is blocked through cross-tolerance and "ceiling effect" (Strain et al 1994). This allows the patient to focus on normalising his/her lifestyle (Ghodse 1995, Swanton 1995, Strain et al 1994). However, in many programmes individuals are maintained on a dose that has been physiologically determined and which can be as small as 10 - 20mg daily (Low Dose Maintenance).

Irrespective of the type of MST offered, or the setting in which it is provided, seven core elements of an MST programme can be identified. These are: 1) convenient location and physical facilities; 2) suitable staffing pattern, including a medical doctor; 3) specified eligibility criteria for admission; 4) timely admission and referral; 5) standard screening procedures including medical examination and urinalysis; 6) informed consent; and 7) an explicit treatment contract.

Rationale for the use of Methadone

The minimal outcome to demonstrate effectiveness of MST is a reduction of illicit opiate use during treatment. This has been demonstrated many times in large-scale studies (Cacciola et al 1998, Sorenson 1996, Ling et al 1996, Bertschy 1995). MST is also known to reduce crime and HIV risk, at both an individual and community level, which in turn enhances social rehabilitation (Cacciola et al 1998). Several studies, including clinical trials and observational studies, endorse MST's efficacy in improving general psychosocial functioning (Ling et al 1996, Bertschy 1995).

Early studies of MST identified a number of characteristics peculiar to the drug methadone, which contributed to its effectiveness as a treatment for heroin addiction (Dole et al 1966, Kreek 1973;1978, Dole 1980;1988). These characteristics are as follows:

- Unlike other opiate maintenance medications, for example, morphine, methadone is long acting and therefore can be dispensed in one daily dose. The features of short acting opiate substitution medications (morphine, heroin, oxycodone and pethidine) associated with an impairment of social functioning are therefore eliminated.
- Patients maintained on methadone report no experience of euphoria, tranquillising or analgesic effects.
- High dose (generally accepted to be 80-120mg/day) methadone, through cross-tolerance and the 'ceiling effect', discourages the administration of other opiates by injection or smoking (Dole and Nyswander 1965).
- Because methadone is effective when administered orally, and because it has a half-life of 24-36 hours, injecting drug use in opiate addicts can be reduced significantly. Several studies show that the rate of HIV seroconversion may be reduced in those on maintenance treatment (Sorenson 1996) with an associated reduction in HIV seroprevalence (Magura et al 1998, Bertschy 1995).
- Methadone provides relief from craving.
- Methadone in approved doses is medically safe and non-toxic.

Many studies attest to the effect of MST on reducing the spread of HIV, because it reduces injecting and the frequency of injecting. An association has been shown between the length of time in MST and low rates of seropositivity. Furthermore, it is demonstrated that patients in MMT are less likely to be HIV positive than those following methadone detoxification programmes (Ward et al 1992).

Other studies have indicated that abnormalities of cellular immunity, common among injecting heroin users, can be normalised when these users are maintained on methadone (Ochshorn et al 1990, Kreek 1988). Methadone during pregnancy is also associated with reduced risks of illicit drug use related morbidity and mortality in both the mother and the fetus (Stimson 1995, Kaltenbach & Finnegan 1992, Ward et al 1992) and has been shown to improve retention in treatment (Ling et al 1996).

Unfortunately, in the evaluation of drug treatment for illicit drug users, randomised control trials (RCTs) are rarely practical or acceptable and methodological limitations are apparent in many of the other forms of studies (Fontaine & Ansseau 1995). Only three major RCTs have been carried out in which methadone is compared to a control condition of no methadone over a substantial period of time. Most other random control trials compare methadone with an alternative drug treatment, or compare different methadone doses (Ward et al 1992, San et al 1990). However, where randomised control trials have been performed, methadone has been found not only to be the key element of the programme but also more effective than the controls on several measures. Such studies also show consistent results in very different cultural settings and over a time frame of 20 years. These findings are supported by large scale observational studies from the USA (Simpson & Sells 1982, Anglin & McGlothlin 1984,) and by European studies (Deglon 1995).

Maintenance versus Detoxification

There are arguments to support maintenance over detoxification. Several reports suggest that abstinence may not be an appropriate treatment goal for some patients (Courtwright 1997, Dole & Nyswander 1965). The important issues in relation to maintenance, centre around its safety, which has been repeatedly reported (Fontain & Ansseau 1995, Deglon 1995), its efficacy, which has been supported (Fontain & Ansseau 1995, Glass 1993) and its cost- effectiveness, which has been claimed (Deglon 1995, Glass 1993).

There are, however, counter arguments in favour of detoxification, especially for younger drug users. While these arguments acknowledge that compliance with a methadone maintenance programme will keep the patient in a physiologically normal condition, able to work and no longer dependent on illicit drugs, there is concern that maintenance is not really treatment in a meaningful sense. Placing someone on a long-term prescription can be argued to offer no hope of recovery, maintaining the dependent state and encouraging a passive acceptance by the drug user of their condition. As such, methadone maintenance should only be regarded as a last resort in the management of opiate dependence (Ghodse 1995).

Issues around the process and content of MST programmes

An MST programme has been described as a physical facility with resources dedicated specifically to treating opiate addicts with methadone (D'Aunno & Vaughn 1992). This definition presupposes that there is no single consistent protocol for MST. The quality of methods used, staffing patterns and, therefore, their effectiveness vary widely (Watson 1997). These variations are sometimes determined by programme philosophy and at other times by the priorities of the funding agencies. MST programmes are divided on what constitutes a therapeutic dose, methods of urinalysis and number of urine samples that should be collected, age limit and chronicity of an individual's addiction before admission, and other inclusion criteria. These controversies have led to legitimate enquiries about the overall effectiveness of MST programmes in the treatment of opioid addiction.

The relative importance of organisational and programme characteristics over patient characteristics have been discussed (Magura et al 1998, Bertschy 1995,

Ball & Ross 1991). It is also thought that treatment variables play a major part in explaining heterogeneity of outcome. These can include dosage, maintenance versus abstinence, and support services. High quality medical and psychosocial services, a clear orientation towards social rehabilitation, treatment longevity and slow detoxification of well-stabilised patients have all been identified as giving the best outcomes (Cacciola et al 1998, Bertschy 1995).

RCTs show a relationship between higher doses (>50mg) and reduced illicit drug use with better treatment retention rates (Ward et al 1992, Ling et al 1996, Fontaine & Ansseau 1995, D'Aunno & Vaughn 1992), highlighting the importance of adequate doses (Magura et al 1998, D'Aunno & Vaughn 1992). Such findings are in contrast with experience in Europe where a low dose (20-40mg) treatment model has been widely practised and recommended.

The role and importance of counselling has become another of the controversies surrounding MST. Despite a growing body of literature which identifies that a combination of employment, housing and medical support services are necessary for the rehabilitation of addicts, most MST programmes provide only limited support services. Often such programmes are advocated as a means of making MST available to more people, due to their lower costs. It is claimed by some that services offering just methadone produce the least number of abstinent patients for cost incurred (Ward et al 1992, Kraft 1997, Sorenson 1996). The effective treatment programmes are claimed to include prescribing higher doses of methadone, having successful maintenance as a goal rather than abstinence, offering medical, social and psychology services, offering improved staff patient relationships and having a lower staff turnover and better management (Cacciola et al 1998). However, it is quite evident that these claims are dependent upon the definition of "effective".

The arguments against methadone and MST

In spite of the number of studies offering evidence on its effectiveness, MST still remains a controversial treatment. The reasons for this are many , for example, defining 'successful' outcome and how to measure it are still being debated (Newman 1987). MST programmes vary substantially in their efficacy, process and content (Bertschy 1995, Farrell et al 1994). Factors relating to this include overall effectiveness (Lippas et al 1988) and appropriate treatment goals, i.e., maintenance versus abstinence (Rawaf et al 1995, Hubbard et al 1989). Other issues include mechanisms for evaluating treatment programmes (Dole et al 1982); monitoring patient behaviour in treatment (Rosenbaum 1985); the use of MST to prevent HIV amongst injecting drug users (Abdul-Quader et al 1987) and the role of governments and other relevant agencies in organising and regulating treatment policies and practices (Farrell et al 1994, Newman 1987).

As a form of treatment MST is still considered undesirable by a significant number of addicts and communities (Schottenfeld et al 1997, Ling et al 1996). There is apprehension in some communities that, although methadone prescribing has been increasing, there is insufficient evidence to suggest that it really is having the desired effect on illicit drug use and risk behaviours (ACMD, 1993). Furthermore, most of the literature relates to oral methadone although, for instance, in the UK there is a range in the formulation prescribed, including an injectable form. The issue of compliance is also poorly researched in Europe and there is still scope to develop the impact of methadone on crime.

The safety of methadone has also been challenged (Schottenfeld et al 1997). Drummer et al (1990) reported the deaths of ten patients who died only days after starting a methadone treatment programme. There is also the problem of deaths due to methadone diverted to the black-market (Scott et al 1996). Some studies

conclude that the majority of methadone related deaths occur in people who were not prescribed methadone (Valmana et al 1998, Cairns 1996). Furthermore, patients who have more than one substance related problem, e.g., alcohol dependence, have greater risks attached to their methadone (Lind,1997). This presents a strong argument for more control of prescribing and dispensing of methadone within MST programmes. Diversion of methadone is a serious concern, which could be addressed by policies and guidelines on supervision of consumption, off-site consumption and response to non-compliance. However, the problem of deaths due to diversion of methadone clearly needs further study.

In addition to concerns relating to methadone itself, other issues have arisen, including the advisability of substituting one addictive drug for another, abuse liability, cost of production or importation of methadone and the problems of loitering and drug dealing around MST premises. Furthermore, there are suggestions that methadone is useful only in the absence of a better alternative (Sommer 1995).

The need for more research

The variations in opinions about the effectiveness of methadone are closely linked with the lack of consensus on two issues : what is MST and which patient population would benefit most from it. In the absence of a globally or even nationally consistent protocol, process and outcome evaluation of MST programmes remains inconsistent across treatment settings. Without sufficient funding to investigate the possible potential positive treatment outcomes related to MST programmes, the efficacy of such programmes may remain largely unproven. The first step in addressing the need for the identification of best practice in MST is process evaluation of existing MST programmes with the aim of identifying both commonalties and variations in programme content and delivery. Such an exercise would provide a common set of criteria (commonalities) in certain elements of the structure and content of a cluster of treatment programmes and the specific criteria (uniqueness) of each treatment programme. The study reported in this monograph was undertaken to provide the background for a framework for future evaluations of MST programmes in Europe.

Chapter 2 Evaluation of MST in Europe: rationale and method

AH Ghodse, C Clancy & A Oyefeso

Introduction

In the mid 1990s the ECCAS group received funding from the United Kingdom Department of Health to undertake a systematic review of policies and practices of methadone substitution therapy (MST) across ECCAS centres. The study was deemed important for a number of reasons.

First, the UK had just embarked on a national research programme, part of which was to follow the progress of patients entering MST programmes. Thus an understanding of MST programmes across Europe, and how the UK compared, would provide additional information and insight.

Second, the structure, process and outcomes of MST programmes in Europe had not been comprehensively evaluated. Some research groups (Bless et al, 1993) have described different policies in member states of the European Union governing the adoption of MST as a treatment modality for opiate addiction. These initiatives, although useful, do not provide a comprehensive picture of how MST programmes are organised. They only indicate that European MST programmes, just like in the rest of the world, are varied and unsystematic.

Third, most EU Member States have emphasised the role of prevention and treatment of problem drug use while recognising the financial burden this can place on society. Consequently, treatment providers are compelled to evolve innovative and measurably cost- effective approaches to the treatment of problem drug users, especially those involved in illicit opiate use. A review of current practices around methadone treatment in Europe should, therefore, provide added value to any individual country's review of MST.

Fourth, as a consequence of the removal of national frontiers following the adoption of the Maastricht Treaty, movement of opiate addicts across Member States of the European Union is increasing. Lack of uniformity in MST policies in Europe may mean that service provision cross-nationally may be seriously hampered. In this light, the EU has expressed the need to promote practical co-operation and action in the health sector, especially within the field of drug dependence. Although imposing uniform standards can be limiting, it is valuable to compare patient care and management and to exchange information and experience on service provision transnationally. To achieve this, the need for good quality, complete and comparable data is paramount.

Problems with Multi-centre Studies

The problems of conducting multi-centre studies are well-documented (Waldron & Cookson 1993; Carbone & Tormey 1991) and are more prominent in those carried out transnationally. They include issues around cultural, historical and political differences between countries, problems of co-ordination of research activities between centres, language barriers (especially those involving translation and comprehensibility of relevant concepts) and administrative costs (Clancy et al 1998). The fact that ECCAS was an already established functioning group, which had negotiated many of these difficulties and problems, facilitated the execution of this study.

Purpose of Study The main purpose of this study was to describe the process and structure of MST programmes in a cluster of treatment centres across Europe. The objectives included an examination of individual and aggregate MST variables comprising:

External factors:
- national policy on methadone prescribing
- requirements for establishing MST programmes

Programme attributes:
- biography
- financial
- personnel profile
- intensity of programme
- type of MST

Treatment/Practices:
- eligibility criteria for admission
- treatment contract
- pre-treatment orientation of patients
- informed consent
- dosing policy
- length of treatment
- discharge policy
- re-admission policy

Methods

Setting and Sample

The study was a transnational survey of eleven addiction treatment centres across nine European countries (eight EC plus Switzerland) (Table 1). It was conducted over a period of 24 months during 1995 and 1997. Respondents were programme staff, nominated on the basis of their long tenure in the programme and expertise with MST. They were all medical doctors, with the exception of the centres in Denmark, and the majority were also programme directors.

Table 1 *MST Programmes by City and Country*

Country	City	Programme Name
Denmark	Arhus	Embedslæge Institutionen
	Ringkøbing	Misbrugsrådgivningen & Embedslæge Insitutionen, Ringkuøbing Amtskommune
France	Paris	Centre Pierre Nicole
Germany	Essen	Klinik für Allgemeine Psychiatrie
Ireland	Dublin	Drug Treatment Centre
Italy	Bergamo	Servizio Tossicodipendenze
	Padova	Servizio Tossicodipendenze
Portugal	Oporto	Centro Atendimento Toxicodependentes
Spain	Barcelona	Hospital del Mar
	Oviedo	Centro de Salud Mental
Switzerland	Geneva	Fondation Phenix
United Kingdom	London	Pathfinder Addiction Services

Design and Instruments

The study design is a descriptive cross-sectional survey with data gathered on the following process variables:

- External factors:

- *National policy on methadone prescribing*: licensing requirements for prescribing; dispensing regulations.
- *Requirements for establishing MST programmes:* staffing; setting; resources.

- Programme Attributes:

- *Biography:* year of establishment, founding body; physical structure and location; catchment population; setting.
- *Financial:* source of funding; budget.
- *Personnel:* staffing patterns; training; staff turnover.
- *Intensity:* type of programme; contents; degree of contact.

- Treatment/Practices:

- *Type of MST:* maintenance versus detoxification.
- *Eligibility criteria for admission:* patient identity; current addiction; age limits; other drug use; high-risk behaviour; past treatment; personal information; reasons for treatment; urine specimen.
- *Treatment contract:* none, verbal vs. written.
- *Pre-treatment orientation of patients:* none, handbook vs. seminar/workshop.
- *Informed consent:* none, verbal vs. written.
- *Dosing policy:* upper and lower dose limits; dosage form (tablets, linctus), form of dispensing, dispensing sites.
- *Length of treatment:* in days.
- *Policies on discharge and re-admission.*

A triangulated strategy was adopted using postal questionnaires, on-site semi-structured interviews and field observation.

Data Collection

A self - completion, 49 - item postal questionnaire was sent to , and completed by, main respondents in each of the participating programmes. The questionnaire items were selected from the literature (D'Aunno & Vaughn 1992, Ghodse 1995). A pilot study was conducted in the Dublin and London programmes. A multi-ethnic focus group was established in the London Centre to evaluate the extent to which the pool of items were representative of process variables in MST programmes (content validation) and their comprehensibility and interrelationships (internal consistency). Recommendations from this focus group resulted in the final questionnaire.

The questionnaire was divided into three sections: background information and history of the Centre's development; operational policies; and background information and historical development of MST in the host country.

Four to eight weeks following the postal survey, the study coordinator visited all programmes and conducted on-site, semi-structured interviews. The purpose of this was to ensure comprehensibility of the 49 items in the non-English speaking centres, to evaluate the consistency in responses (stability and convergent validity) and to carry out on-site observation of programme activities.

The style of the interviewing was deliberately kept open ended to allow respondents as much latitude as possible to expand on the areas addressed in the questionnaire, but which were specific to the operational practices of their individual centre. To minimise interviewer bias all interviews were conducted by the study coordinator. Furthermore, the length of each interview was kept to a similar time span, i.e., one working day in each centre.

The interviews in all centres, with one exception, were conducted in English. The Spanish centre which required the use of an interpreter was given extended interview time. The interpreter, who was specifically employed for the task, had an adequate technical knowledge of the subject.

During the on-site visits the study coordinator was taken on conducted tours, which permitted observation of, and discussion with, programme staff about their work and roles, and their views of the MST programme. Although these discussions were informal, efforts were made to include broad areas of relevance to the study within the discussion. Following such meetings and observations, field notes were made and used in clarifying other data or to add new information to the data pool. Formal interview records were transcribed by the study coordinator from tape to computer, thus ensuring consistency and preventing loss of relevant complementary data.

Analysis

Analyses of data were mainly qualitative. Different techniques of qualitative data analysis were adopted. These included cross tabulation, descriptive matrices, content analysis, cross-case analysis, contrast analysis and within-case analysis (Miles et al 1984).

Cross tabulation of metric responses and other relevant univariate analyses were carried out using Epi Info Statistical Software Version 5.00 (Dean et al 1990).

Semi-structured responses were analysed using thematic methods of content analysis and descriptive matrices. Themes were developed around operationally defined process variables, as outlined in the methods section. The frequencies of the thematic responses were subsequently summarised and tabulated.

Cross-case Analysis involved the examination of commonalities in programmatic variables across all participating centres. Contrast Analysis examined the differences in programme variables between centres. Within-case Analysis provided detailed descriptions of programme variables in each centre.

Transcripts of the interviews and data processed from the postal surveys were combined and returned to main respondents for technical proofing to ensure that technical errors, or any changes which had taken place since the interviews, could be amended.

The following chapters provide details of policies and practices in the different centres.

Section II

Individual Programme Profiles

Chapter 3 MST in Denmark - A social services model: The Arhus experience

K Runge Nielson

Introduction

The emergence of drug problems in Denmark can be traced back to around the mid- to late 1960s, concentrated predominately in the country's capital city of Copenhagen, where it is still estimated that the majority of drug addicts reside today. Overall responsibility for the administration and provision of treatment for drug addiction lies within the social sector, organised into thirteen county councils and one hundred and sixty municipalities. Although drug misuse is increasingly considered an important issue, it continues to take second place to problems related to alcohol dependency.

The initial emphasis for the type of methadone treatment that should be provided was for detoxification over very short time periods. In the 1970s, an Inter-ministerial Advisory Committee on Drug Abuse published guidelines on the use of methadone, which did not advocate maintenance as an option. It was not until the end of that decade that attitudes gradually began to shift and, as in most other European countries with the advent of HIV and AIDS, maintenance was endorsed in the early 80s. From these attitudinal changes emerged the recommendation that each county should establish a multi-professional 'Social Medicine Committee' which would approve all applications for methadone maintenance treatment. The main prescribers of methadone have been general practitioners (GPs), psychiatrists and doctors attached to specialised drug treatment institutions.

In 1988, in response to growing concerns that control over prescribing was too loose and that too many GPs were prescribing, a governmental body, the Alcohol and Narcotics Commission, amended the earlier guidelines on methadone prescribing. It advocated that specialised treatment centres should be established for methadone maintenance and that, in general, GPs should not be permitted to offer this form of treatment. This recommendation was not a blanket rule, as it was equally recognised that, under certain conditions, prescribing by GPs could be appropriate. The Commission advocated that there should be a limit on the number of patients the GP could prescribe for at any one time (i.e., ten) and that a designated drug treatment centre should continue to carry overall responsibility.

In January 1996, a new law was introduced which stipulated that only doctors specifically appointed and employed by the local County Council will be licensed to prescribe methadone. It was intended that these doctors would be part of a multi-disciplinary team, most probably attached to existing specialist units.

Programme Profile	**Staff Profile**	1 Doctor 7 Social workers 4 Psychologists 11 Social Educators 1 Detoxification worker 0 Nurses	
	Main Treatment Settings	Out-patient, In-patient, Community Day programme Residential rehabilitation	
	Programme Variables	Type of treatment	Detoxification
		Average time in treatment	30 days
		Average frequency of attendance	3 times per week
		Allocation of keyworker	Yes
		Methadone dosing & dispensing policy	Range 20 – 60 mgs
		Dosage form	Linctus
		Dispensing site	Community pharmacy

The centre was first established in 1969 and was funded initially by the Community of Arhus. Fifty percent of the funding was later added from the County of Arhus following a change in the social law. The centre is part of a larger organisation which offers a range of social services, including the methadone programme and general treatment services for addiction, to the Community of Arhus. There are twenty-six communities in the county, of which Arhus is the largest, taking up fifty percent of the geographical area, with a population of about 300,000. The methadone programme has no limits on treatment places and, if necessary, can arrange for treatment outside the county (i.e., residential). Fifteen percent of the centre's overall activities is attributed to the methadone programme.

Current funding is derived from public monies which are secured through both local and county funding (50% Community and 50% County). The total budget is 42 million DKr (UK£3.87 million), of which approximately 18 million DKr is spent annually on in-patient treatment. This includes placing recovering drug free clients in 'family-care' * and residential treatment centres.

Structure

Staffing

As overall responsibility for the administration and provision of treatment for drug addiction lies with the social sector, this is reflected in the staffing composition. The majority of disciplines working in the centre are from psychology, social work and education. There is only one medical doctor, who is also the clinical director. No nurses work in the programme as historically this discipline has not been seen to have a role. The centre is under the direction of a psychologist and has one member of staff with the title of 'Detoxification Worker', who is an ex-drug addict.

* This is a system of rehabilitation, where recovering addicts are placed with families specifically employed to act as 'role models' and assist the client to reintegrate into society.

Type of Methadone Treatment Offered

Since November 1993, maintenance treatment has ceased to be offerd, although a number of patients who had started on the programme prior to this date still receive this form of treatment. The change in policy applies only to those patients who drop out of treatment and return, or to new patients. Detoxification is the only option now available and generally does not exceeed three months. The programme is offered on an out-patient basis.

Other Related Policies

There are no policies specifically related to HIV/AIDS or hepatitis, and patients are not encouraged to be tested. The centre has no experience of HIV positive patients. Patients who request HIV testing are referred to an appropriate service. In an effort to facilitate m anagement of risk behaviour free condoms are available. The centre does not provide a needle/syringe exchange service. Injecting equipment is however, easily obtainable free of charge from community pharmacies.

Process

Admission

The programme accepts referrals from any source, including the courts and police. The average length of time between a referral and assessment is 1- 4 weeks.

The patient's identity is sought as the centre must obtain permission to prescribe from the 'Social Medicine Committee'. The primary requirement for admission is current physical dependence on opiates confirmed through information collected on the patient's current and past drug use, and positive urine test for opiates.

Individuals under 18 years old will not be accepted for treatment but are referred to the child/adolescent services.

Patients do not have to give formal consent before admission into treatment. A pre-treatment orientation of patients is offered in the form of general seminars. Patients attend the induction seminars whilst waiting for prescribing to commence.

Assessment

Following referral to the service, patients are offered an appointment with the doctor and social worker. The average time between assessment and commencement of treatment is between one to three months. Taking a drug history and carrying out a urine toxicology are the core components of a routine assessment. Further laboratory investigations, physical examination and chest x-rays are carried out if indicated.

Discharge/Re-admission

There are certain conditions which may precipitate involuntary discharge from the programme, e.g., dropping out of treatment or failure to comply with the treatment programme. If the patient's discharge was precipitated by physical violence or drug trafficking within the centre, a behavioural review will be undertaken by the staff and the patient's name could be placed at the end of the waiting list, thus delaying the patient's re-admission.

Content

Detoxification is the main treatment offered by the centre. It includes regular counselling, onsite medical and psychiatric care, family therapy,

employment/vocational counselling and other support services. Patients meet with their keyworker, who have training in either social work or psychology, at least once or twice a week for individual counselling in sessions of up to sixty minutes in duration. Urine specimens are collected for screening - up to 12 samples per patient per month.

Patients undergoing detoxification are offered a contract ranging from 8 days - 90 days as an out-patient, with an aftercare programme which extends beyond this period. The centre can also arrange detoxification as an in-patient in a purpose built institution outside of the county in the northern part of Jutland. The in-patient service provides detoxification over a three month period with a recovery follow-up programme for a further three months.

Chapter 4 MST in Denmark - A social services model in a rural setting

D Nielsen & B Sommer

Introduction Please refer to Chapter 3 for the background to the Danish system

Programme Profile

Staff Profile	1 Doctor The majority of the other staff have backgrounds in:l Social work Psychology Education	
Main Treatment Settings	Out-patient	
Programme Variables	Type of treatment	Maintenance
	Average time in treatment	Not known
	Average frequency of attendance	Not known
	Allocation of keyworker	Yes
	Methadone dosing & dispensing policy	Range 20 – 120 mgs
	Dosage form	Linctus
	Dispensing site	Community pharmacy

Structure The service was established in 1975 by the County of Ringkøbing and offers treatment from multiple sites in urban, suburban and rural locations throughout the county. The catchment population served is 270,000. The broad aims of the service are to prevent drug abuse, co-ordinate treatment, reduce harm and reintegrate and support both the individual and his/her family into a stable lifestyle. The addiction service provides a variety of treatment programmes, with methadone only making up 10% of the overall service activities. The service is funded directly through public monies with an estimated budget of 12,500.000 DKr (UK £1.15 million). Approximately 8% of the total budget is directed towards the provision of methadone programmes. The service currently has 800 patients receiving treatment, of which 5% are in the methadone programme. Drug addicts are treated in a part of the service known as the Drug and Alcohol Counselling Centre. This Centre has a county-wide responsibility, with regional offices in three of the county's central regions - Ringkøbing, Herning and Holstebro. The majority of addicts who are diagnosed as opiate dependent are not offered methadone as the first treatment response.

In the past five years there has been one death among drug addicts in treatment with methadone (April 1997; the cause of death was heart disease). In the last year, the number of intravenous opiate addicts receiving methadone treatment at a given time was approximately 30. Furthermore, the number of individuals receiving methadone treatment for over a year has more than doubled. This is a significant increase, approximately a doubling, over the last five years. This should not be taken as an expression of a corresponding rise in the number of drug addicts, but is more likely due to a higher level of attention to the problem and knowledge of treatment programmes.

Staffing

Overall responsibility for the administration and provision of treatment for drug addiction lies with the Social Sector. Most of the staff working in the centre have backgrounds in psychology, social work and education. The service employs a medical practitioner with responsibility for prescribing methadone.

Type of Methadone Treatment Offered

The service offers only methadone maintenance treatment on an out-patient basis. The methadone is dispensed in linctus form from community pharmacies. The average dose is 70mgs.

Methadone cannot be given as part of a court order sentence. Furthermore, HIV infection cannot by itself serve as a basis for methadone treatment. Methadone can only be given as part of a total treatment programme.

Other Related Policies

HIV and hepatitis testing is encouraged for all addicts. General health counselling is offered to patients on request. Needles are provided free of charge.

Process *Admission*

Referrals are accepted from any source, including courts and police. Patients referred to the centre are usually assessed within a few days.

The addict's identity is required, as the centre must seek permission from the Medical Committee to prescribe. The primary requirement for admission is current physical dependence on opiates, confirmed via information collected on the addict's current and past drug use, and a positive urine test for opiates.

There are no exclusion criteria.

The tasks of the Medical Committee are as follows:

- To assist the schools and social area in determining the scope of the drug abuse problem.
- To offer assistance to medical practitioners and social workers in the treatment of drug addicts.
- To assist social administrations in the co-ordination of municipal, country and medical initiatives.
- To act as advisers to the Drug and Alcohol Counselling Centre's doctors in planning the allocation of methadone.
- To obtain agreement in negotiations with the medical profession that no short-term methadone treatments will be initiated before consultation with the Medical CommitteeJoint Council.
- The health officer maintains an overview of the doctor's treatment programmes and can advise the Medical Committee on trends.

The Medical Committee Joint Council consists of a representative from the health officers association (chairman), two practising doctors (designated by the general practitioners organisation), the head of the Prison Service and the head of the Drug and Alcohol Counselling Centre. The Drug and Alcohol Counselling Centre's regional heads and doctors and the head and one departmental sister from Skovvang rehabilitation centre participate in all meetings but are not members of the Medical Committee. Practising doctors, municipal case workers, the police, pharmacists and other persons with

specialist knowledge are also invited to provide advice on both general and individual cases.

The Medical Committeel meets twice a month in the southern and northern parts of the county. The Drug and Alcohol Counselling Centre acts as secretariat to the Medical Committee.

Formal written consent must be given by the addict before admission into the treatment programme, and a formal written treatment contract is established between the addict and the staff. As part of the pre-treatment orientation process, addicts are given a general seminar and information about the treatment and the services available.

Assessment

In the first instance the prescription is based on guidelines from the National Board of Health. An individual assessment, which takes account of the circumstances described below, is then made.

Methadone treatment is prescribed only when it is judged not possible for the patient to remain drug-free, and other relevant treatment alternatives have been tried without success. The treatment is given only to older drug addicts who are physically and mentally affected by their addiction. There may be somatic ailments such as inflammation of the liver, blindness, chronic sores and boils, brain damage and dementia. The individual concerned must also have 'exceptional lives' or be threatened by violence, where it is to their own advantage to be isolated from their current environment. The addict himself must be motivated to discontinue the use of illegal drugs and have a desire to commence methadone treatment.

Two to four members of staff are involved in the assessment process, including a medical doctor, social worker and psychologist. Taking a drug history and carrying out medical examination are considered the core components of a routine assessment. Further laboratory investigations, urine toxicology and chest x-rays can be carried out if indicated.

Discharge/Re-admission

Addicts who do not complete their treatment and/or 'drop-out' must undergo re-assessment before staff will consider re-admission.

Content

Methadone Treatment

Support and care are provided, along with supervision to ensure that the addict does not commit crimes or continue drug abuse in addition to the methadone treatment.

The pharmacies in the County of Ringkjobing dispense the methadone facilitated by close collaboration between the Drug and Alcohol Counselling Centre and the pharmacy. The pharmacy also provides free needles to drug addicts.

As only 5% of the client population is taken up with methadone treatment directly, the majority of the centres activities are centred around the following:

Preventive care

Two members of staff are directly responsible for providing general information to the population on the prevention of drug abuse problems and to advise the municipalities on the preventive work of the Centre.

Advisory service

The Drug and Alcohol Counselling Centre's advisory service to drug and alcohol abusers is provided at three regional offices in Herning, Holstebro and Ringkobing, where, together with an adviser, the most suitable course of treatment can be devised for the individual addict. The Centre also has a mobile service which travels to addicts who are far from one of the three regional offices.

Outpatient treatment and day care

Outpatient treatment and day care takes place at one of the Drug and Alcohol Counselling Centre's regional offices and in the addict's own home. Treatment for young drug addicts is available, and treatment, support (only in the case of methadone treatment) and care are provided for older drug addicts. The treatment itself includes discussions, social activation offered over various time periods. There are three main types of treatment.

The first type is individual treatment and is initiated as required immediately after the drug addict has been identified. The treatment includes individual discussions, referral to a social network, socio-educational activation, and support in the local community. Follow-up around-the-clock treatment may also be provided, with discussions with the addict and the relevant in-patient service during the treatment. Follow-up treatment adapted to individual requirements may be provided with discussions and socio-educational support in direct extension of the course of treatment.

The second type of treatment is directed towards cannabis users. The course of treatment is worked out in advance and is of 10-13 weeks duration, but is available only if supported by considerations of geography and numbers. This treatment includes individual discussions based on the Swedish-Aarhus model, a referral to a public network, and socio-educational activation and support. The target group is addicts dependent primarily on cannabis. Follow-up treatment may be provided with discussions and socio-educational support in direct extension of the treatment, which is adapted to individual needs.

The third type of treatment offered is group work. The treatment is worked out in advance and is offered for a variable number of weeks once or twice a year. It is possible to combine several different treatments. This treatment includes group discussions, education and cultural elements, socio-educational activation, and arrangements. The target group is addicts found suitable for group treatment and who require motivation. There may also be follow-up treatment with discussions and socio-educational support in direct extension of the treatment, which is adapted to individual needs.

Socio-educational treatment is also available to recipients of methadone. The treatment is given as required immediately after identification of the need for and approval of methadone treatment. Treatment is given according to a programme planned in advance and includes special arrangements, excursions, short courses, and support and motivational discussions. The target group is primarily addicts undergoing methadone treatment at the maintenance level or who are motivated to seek drug-free treatment.

Detoxification

Detoxification of drug addicts is offered when the abuse is intensive and acute help is considered necessary. Detoxification may be via outpatient treatment, in the addict's own home, in hospital, or provided within more

specialised institutions. Detoxification usually occurs after application to the person's own doctor or the duty doctor. After detoxification, counselling, treatment, or support and care are offered as quickly as possible.

In-patient Treatment Service

If 24-hour treatment is considered necessary, treatment can be given at in-patient services situated outside the county.

Follow-up work

In 1996, a special treatment programme was initiated for preventive work for individuals who are considered socially marginalised. Staff visit the disadvantaged person at the place where the person lives such as parks, public places and similar areas. If the disadvantaged person is motivated, contact is arranged with the programmes which already exist for the socially disadvantaged to improve their situations and with the Drug and Alcohol Counselling Centre if treatment is required.

Chapter 5 MST in France - An emerging treatment modality

S Wieviorka & C Gionnet

Introduction

Responding to drug misuse problems in France, in the absence of sufficiently sophisticated data on the nature and prevalence of illicit drug use, has proved difficult. A review of literature reveals that there is a strong belief that the national policy on drug misuse has concentrated on regulatory control and primary prevention. The issue of methadone prescribing as an adjunct to treatment for opiate addiction has been debated extensively over the years. The opinion favoured has been towards no prescribing or "prescribing for a few cases". These views were enshrined in legal restrictions on the number of individuals who were allowed to receive methadone at any one time. For instance, only 52 people were permitted methadone as part of their treatment at the start of 1993. The advent of the HIV/AIDS epidemic however, led to a shift in policy in favour of methadone treatment for opiate addicts.

In March 1994, the government published a treatment protocol on the management of methadone programmes, which included eligibility criteria and the maximum number of places per centre. A further change occurred in April 1995, when the option for general practitioners (GPs) to prescribe was introduced. However, there is a restriction on the type of patients who can opt for this treatment setting. Initially they must been seen by a Specialised Addiction Treatment Centre and must demonstrate stability both in their drug use and lifestyle. Once the patient has met these criteria, onward referral to their GPs can be considered. No patient can be accepted for treatment by a GP without a written referral from the specialist centre. Should a patient drop out of treatment he/she must return to the centre for re-assessment before being accepted back by the GP.

Programme Profile

Staff Profile	7 Doctor s 2 Social workers 3 Psychologists 15 Social Educators 8 Nurses	
Main Treatment Settings	Out-patients In-patients Community Residential rehabilitation	
Programme Variables	Type of treatment	Maintenance
	Average time in treatment	None
	Average frequency of attendance	4 times per week
	Allocation of keyworker	Yes
	Methadone dosing & dispensing policy	Range 15 – 100 mgs
	Dosage form	Linctus
	Dispensing site	Centre only

Structure

The centre was formally established by the Red Cross organisation in 1979 and operates from two sites, both of which are situated within the inner city boundaries. One of the sites is designated for assessment and counselling and the other, in

addition to carrying out these functions, is responsible for running the methadone programme. The programme has its own designated space, with a separate entrance, waiting area and offices for staff and the dispensing of methadone. There is no defined catchment area, although the majority of patients reside within the Paris boundaries or suburbs. The "no catchment area" rule is due to a law passed in 1970 which entitles a patient to anonymity, thereby removing the issue of residency. The centre is funded by central government and treatment is free at the point of entry. The total budget for the centre is 15 million francs (£UK 1.58 million), of which 15-20% is spent directly on the methadone programme.

A maximum of seventy methadone treatment places are available. This is an internal decision rather then a Government directive.

Staffing

The staff composition is multi-disciplinary. All the doctors in the centre, with the exception of one family doctor, are psychiatrists and five have been formally trained in addiction. The centre's director is a medical doctor. The roles of the nurse and the social worker are considered to be very similar, with one exception - the nurse is also involved in methadone dispensing. The educator is primarily responsible for social rehabilitation. Ex-addicts are not employed as members of staff. Some staff have worked in the field of addiction and/or at the centre for more than 20 years

Type of Methadone Treatment Offered

The programme does not currently offer detoxification, although this treatment is planned for the future. Should patients wish to be detoxified they can be referred to a local general hospital for in-patient treatment, which offers detoxification without using methadone. For patients receiving methadone maintenance treatment there are arrangements for 'take home' privileges, but these are only granted to stable patients.

Other Related Policies

There is a formal policy on HIV and hepatitis testing which encourages all patients to be tested. Testing, however, is not carried out at the centre, for this service patients are referred to a specialist centre or their family doctor. Patients who are diagnosed positive for HIV/AIDS and/or hepatitis B and C will be referred to the appropriate medical services. Liaison and ongoing care are shared between the centre and medical services. In addition, a hepatitis B immunisation programme and general health counselling is available. Condoms are also provided, free of charge.

Process *Admission*

The programme accepts referrals from any source, including the courts and police. The average waiting time between referral and assessment is two weeks. Formal identity is not sought, due to the law previously mentioned which protects patient anonymity. The primary requirement for admission is current physical dependence on opiates, confirmed through information collected on the patient's current and past drug use, routine medical examination and positive urine test for opiates.

Persons under 16 years old are not usually accepted for treatment. However, due to the anonymity clause it is difficult to enforce this regulation.

Patients do not have to give formal consent before admission to the programme. Although no formal pre-treatment orientation of patients is given,

patients are advised of the treatment protocols and encouraged to discuss the treatment package with the doctor.

Although the majority of patients who present are assessed to be opiate dependent, only some are offered methadone treatment as the first treatment response. The reasons for this are (i) restricted number of places available within the programme, and (ii) a questioning attitude regarding the effectiveness of methadone within the centre and, more widely, within the country.

Assessment

Following referral to the service patients are offered an appointment with the doctor, who conducts the assessment and subsequently makes an offer of treatment. Following initial assessment with the doctor the patient has a subsequent interview with the psychologist and social worker. The nurse is primarily responsible for the operational aspects of the dispensing and supervision of methadone. The average time between assessment and the start of treatment ranges between one to two weeks depending on a place being available within the programme. Should a place not be available the patient can wait for several months. Taking a drug history and carrying out a urine toxicology are the core components of routine assessment.

Some of the criteria considered when offering a patient a place on the maintenance programme are a chronic drug history, numerous failed detoxifications and pregnancy.

Discharge/Re-admission

Factors which precipitate involuntary discharge from the programme include physical violence, drug trafficking on the premises and repeated positive urine samples for illicit drug use. If the patient drops out of treatment or fails to comply with the terms of his/her treatment programme, each case will be individually reviewed before deciding whether to re-admit. If the patient is discharged on a disciplinary matter, e.g.,, violence or drug trafficking, he/she will not be re-admitted to the programme.

Content Maintenance is the main form of treatment available. It includes regular counselling, on-site medical and psychiatric care, family therapy and employment/vocational counselling. Mandatory attendance at the programme is initially set at five days per week, reducible to once a week when the patient becomes stable. Patients must initially see their doctor several times a week. Once engaged with the programme and considered to be stable, this falls to once a week. Patients can be allocated a keyworker, but this is not routine. The average period for a counselling session is 30 minutes. Urine specimens are taken randomly for screening, between two and three samples per patient per month.

Maintenance treatment is not time bound, although generally the minimum length of time in the programme is one year. Each case is kept under review, including those patients receiving an indefinite prescription.

Chapter 6 MST in a general psychiatric setting - A perspective from Germany

C Rösinger & Th. Finkbeiner

Introduction

Abuse of opiates in West Germany began to peak in the early to mid-1970s. Prior to this time there is limited information available on the nature and extent of drug abuse problems, apart from some evidence of cannabis use, isolated pockets of codeine abusers and post-World War Two morphine addicts confined primarily to veterans. During this period services for drug misusers were mainly located either in residential or in-patient settings. The development of out-patient services is a more recent phenomenon.

A national plan for combating drugs was passed by the government in June 1990 with the following aims: to improve the control and monitoring of chemicals and apparatus used in clandestine laboratories; to facilitate the updating and systematising of police information systems, to ensure compatibility with European databases; and to promote data gathering in the areas of money laundering.

All doctors are legally permitted to prescribe opiates under a Federal Narcotics Law passed in 1971, which places methadone in Schedule III. The general trend, however, is for either the patient's family doctor or one of the specialist doctors working in a drug clinic to be the prescribing doctor. This law was subsequently modified in 1982 to facilitate the diversion of drug addicts from the criminal justice system into the treatment system.

The central conditions for methadone programmes are regulated by the narcotics laws and the so called "NUB" conditions. The latter, which in 1991 extended its conditions to include methadone treatment, assisted methadone programmes to gain recognition by health insurance companies as offering legitimate treatment. To qualify for reimbursement under an insurance scheme, patients must fall within certain criteria, e.g., addiction with life-threatening conditions during withdrawal; addiction among AIDS patients; addiction during pregnancy. Generally, doctors who deem methadone treatment necessary will make an application to the Substitute Commission under section 2.3 of the NUB guidelines, clearly stating psychosocial hardship as the reason for treatment. This Commission is charged with authorising the prescription of methadone. Once permission is obtained doctors must complete a prescription in triplicate, copies of which are sent to the insurance company and the federal authorities. In addition, the doctor must keep the Commission informed of treatment progress or termination.

The common form of methadone, which is used by the majority of countries in Europe, and indeed the rest of the world, is a mixture of two kinds of molecules: levo-methadone and dextro-methadone. In Germany both this form and the purified levo-methadone form, which is manufactured by a German company under the brand name of L-Polamidon, are permitted.

Programme Profile

Staff Profile	1 Doctor 1 Social worker 1 Psychologist 1 Nurse		
Main Treatment Settings	Out-patient In-patient Community Day programme Residential rehabilitation		
Programme Variables	Type of treatment	Detoxification	Maintenance
	Average time in treatment	60 days	6 years
	Average frequency of attendance	Daily	Daily
	Allocation of keyworker	Yes	
	Methadone dosing & dispensing policy	Range 10 – 250 mgs	
	Dosage form	Linctus	
	Dispensing site	Centre only*	

* Holiday arrangements for patients on maintenance can be made at community pharmacies.

Structure

The treatment of addiction is only one of the many services provided by the Klinik für Allgemeine Psychiatrie, a large general psychiatric department located within the campus of the University Hospital. The hospital, which was built in the mid-1970s, offers a comprehensive range of general and specialist services. In addition to an out-patient service, which offers a general addiction and methadone clinic, there is an in-patient alcohol and benzodiazepine detoxification unit with 15 beds. There is also a separate residential recovery unit for alcohol and benzodiazepine patients with a dual diagnosis. Two beds are allocated on each of the five general psychiatric in-patient units for patients who require opiate detoxification. The Psychiatric Department has a catchment area of approximately 210,000. The surrounding environment/neighbourhood is an inner city area. As the centre is not just dedicated to the provision of addiction services, the percentage of activities taken up by the methadone programmes are estimated to be between 5-10%. This may account for the fact that the centre has a limit on the number of treatment places - currently sixty - for the out-patient methadone programme. The centre's main aim is to provide a general psychiatric service, including addiction treatment, with a research and teaching component, to the region.

Funding is provided by the Government through the *Gesetzliche Krankeversicherung* (GKV), a statutory health insurance. Approximately ninety percent of the population is covered under this system, with the remaining ten percent covered by private insurance and other schemes, such as those for civil servants and those in receipt of supplementary benefit with automatic health insurance.

Funding for methadone treatment can be complicated, as there is a distinction made between the costs attributed to prescribing and related physical health and those required for the psychosocial aspects of treatment.

Staffing

The centre has a large multi-disciplinary staff, including one Head of Unit - a professor in psychiatry, 10 senior doctors (full-time) - each allocated a minimum of two assistant doctors, approximately 115 nurses (full/part-time) and 6 social workers (full/part-time), 6 psychologists (full-time), paramedical and administrative staff. Only a small number of the staff are directly responsible for the methadone programme: a doctor, a part-time nurse and a full-time social worker. A psychologist, allocated to the out-patient psychiatric unit, provides part-time input to the addiction service. The doctor currently responsible for managing the methadone programme has worked in addiction for 10 years and for 4 years at the centre; the nurse has worked at the centre for 5 years, the psychologist for one year and the social worker has worked in addiction for 1.5 years.

The remaining staff take responsibility for the other elements (i.e., in-patient units) of the service, with each section (10 in-patient units: 3 psychotherapy, 4 closed general psychiatric wards, 1 detoxification unit and 1 residential recovery unit for alcohol/benzodiazepines; and 1 mixed general psychiatric ward) headed by a senior doctor. The social workers work full time in the department, dividing their time equally amongst the ten units. A similar arrangement is in place for the psychologists.

The doctors at the centre hold post-graduate qualifications in psychiatry; some have also trained as neurologists and psychotherapists. Training in addiction is included in the overall educational curriculum for psychiatry. As the centre is based in a teaching hospital, there are some doctors in training positions. The training background for nurses is in both general and psychiatric nursing with no formal training in addiction. There is no formal policy regarding the employment of ex-users to work in the centre, although no such staff work there at present.

Type of Methadone Treatment Offered

Maintenance is the predominant treatment type offered, with detoxification offered to a limited number, both as an in- and out-patient. The detoxification treatment does not generally exceed three months, however, this time period is reduced to a maximum of three weeks if the detoxification is taking place within an in-patient setting. The maintenance treatment offers a daily methadone dose for a prolonged period with no set completion date.

Other Related Policies

There is no formal policy on HIV or hepatitis testing as such although patients are encouraged to be tested. If a patient is diagnosed with HIV/AIDS there is a special clinic within the university hospital where patients are referred. The centre works closely with this service. This is also the case for patients who are hepatitis B and/or C symptomatic. Referral and liaison with the patient's family doctor and/or hospital medical services are also carried out.

The centre does not directly provide condoms or injecting equipment, but these are available at a drug counselling service in the city, which also works closely with the centre.

Process *Admission*

Referrals are accepted from any source, including the courts and police. The average length of time between a patient being referred to the centre and being seen for an assessment is two weeks.

The patient's identity is sought as the centre must seek reimbursement from the health insurance company, to whom a copy of the prescription must also be sent. The primary requirement for admission is current physical dependence on opiates substantiated through information collected on the patient's current and past drug use, routine medical examination and positive urine test for opiates.

Under 18 year olds are not accepted to the programme, but are referred to the child/adolescent services. Patients who are unable to provide evidence of a permanent address will not be accepted for maintenance treatment. Under such circumstances in-patient detoxification is offered.

Written consent is requested from patients before admission to the methadone programme, at which time they are advised of the treatment protocols and encouraged to discuss the treatment package with the doctor

Assessment

Following referral patients are offered an appointment with the doctor. He/she will make the assessment and subsequent offer of treatment. Input from other staff will depend on the patient's needs, e.g.., referral to a social worker for housing/social benefits advice or to a psychologist for psychological assessment. The nurse is primarily responsible for the operational aspects associated with the dispensing and supervision of methadone. The average time between assessment and commencing a programme can range between two weeks and two months.

A number of core components are routinely carried out for every assessment. These include taking a drug history; physical examination; laboratory investigations and a range of blood tests, including hepatitis & HIV screening, liver function tests, electrolytes, urea and urine toxicology. Chest x-rays will only be ordered if indicated.

Depending on the outcome of assessment, patients are allocated to a particular type of treatment i.e., maintenance or detoxification.

Discharge/Re-admission

In the event that a patient drops out of treatment or fails to comply with the terms of the treatment programme the centre will review the case and may re-admit after a period of six months (this period does not apply in emergency cases). The centre has had no experience of discharging a patient for disciplinary reasons, e.g., physical violence or drug trafficking on the premises. Should this occur there is no policy for banning the patient.

Content The majority of the methadone programme activity is centred around maintenance. In addition to the methadone prescription, regular counselling and on-site medical and psychiatric care are offered. Depending on the patient's needs extra options such as employment/vocational counselling and other support services can be offered. Mandatory attendance at the programme is dictated by type of treatment and the patient's stability. Patients must attend the programme daily in all cases if they are undergoing detoxification, and in the majority of cases for those receiving

maintenance treatment. In the case of the latter, if the patient is considered to be doing well, i.e., stable, with no positive urine samples for illicit drug use, he/she will be granted “take home privileges”. This practice is, however, rare.

Patients undergoing detoxification will be offered a treatment contract ranging between 7 and 90 days as an out-patient and between 7 and 21 days as an in-patient. Maintenance treatment is not restricted to any particular time period. All cases are reviewed periodically to assess treatment progress and changes in dosage levels.

Patients are seen weekly for a counselling session. Each session lasts for approximately 30 minutes. Urine specimens are taken randomly for screening of illicit drug use. Patients undertaking detoxification must submit a total of eight samples per month, whilst those on maintenance must submit a total of four.

Chapter 7 MST in an inner city setting - Dublin, Ireland

J O'Connor

Introduction

The problem of drug misuse in Ireland , and particularly in Dublin , first became apparent in the mid-1960s with the emergence of sporadic amphetamine abuse. By the early 1980s a sudden shift towards opiate abuse, mainly heroin, occurred. Opiate abuse still continues to be a problem confined to the greater Dublin area and concentrated, specifically, in the deprived sectors of the city. Outside of Dublin, mainly in the cities of Cork, Galway and Limerick, ecstasy and cannabis are reported as the main drugs of abuse.

During the 1970s, drug treatment services consisted primarily of two services, the National Drug Treatment Centre and Coolemine Therapeutic Community. By the early 1980s a gradual expansion of services began with the employment of specialist addiction counsellors in the community and greater developments in the voluntary sector. By 1989 a harm reduction 'low-threshold' programme was established in the city centre of Dublin. In the early 1990s various governmental reports were published in response to growing concerns. As a result of the recommendations of these reports, drug treatment services expanded rapidly, with particular emphasis on public health issues. This led to satellite clinics being established under the auspices of the Eastern Health Board. One of the main impacts of these developments is the increased number of methadone maintenance treatment places. In addition, there are now approximately nine needle exchange programmes in Dublin, compared to just one in the late 1980s.

Methadone was first used in Ireland by the Dublin Centre as a treatment for opiate addiction in 1969. Although all doctors are legally permitted to prescribe opiates, the practice is left to either the patient's general practitioner (GP) or one of the specialist doctors working in the drug clinics. A protocol for prescribing methadone was drawn up in 1993 in an attempt to engage GPs in the treatment of heroin addiction. In addition, and following on from a recommendation in the Methadone Protocol, a Central Methadone Register was established and has been operational since 1994. Current evidence from this register suggests that approximately one thousand patients are engaged in methadone treatment in the Greater Dublin area.

[*] *Government Strategy to Prevent Drug Misuse, 1991; AIDS Strategy Committee Report, 1992

Programme Profile

Staff Profile	9 Doctor s 4 Social workers 2 Therapists 8 Nurses		
Main Treatment Settings	Out-patient In-patient Community Day programme Residential rehabilitation		
Programme Variables	Type of treatment	Detoxification	Maintenance
	Average time in treatment	18 days	Open
	Average frequency of attendance	Daily	Daily
	Allocation of keyworker	Yes	
	Methadone dosing & dispensing policy	Range 20 – 80 mgs	
	Dosage form	Linctus	
	Dispensing site	Centre only*	

* Holiday arrangements for patients on maintenance can be made at community pharmacies.

Structure

The methadone programme is sited within the centre, which was first established in 1969 by the Department of Health, in Jervis Street Hospital and relocated to its own purpose-built building at Pearse Street in 1988. It is located on one of the main routes into the city. As the first and only tenant in the building, the centre has had the advantage of designing the interior to meet the needs of the service and those of the client population. The surrounding environment and neighbourhood is representative of an inner city area. Although the centre serves all of the Republic of Ireland, its main catchment area is Greater Dublin (the capital city) with a population of 1.25 million. Seventy percent of the centre's activities are taken up by the methadone programme.

The Department of Health funds the service with a total annual budget of approximately one million Irish Punts (£UK 892,857). The methadone programme costs less then 50% of the centre's total annual budget.

Staffing

The clinical staff is multi-disciplinary. Within the stafff group experience in the field of addiction is varied , as is the number of years working at the centre.

The professional training, both general and specific, varies according to discipline. The majority of the doctors, in addition to their general medical training of five years, currently hold or are training for a post-graduate qualification in psychiatry. The remaining doctors are general practitioners (GPs) or are in training. Two of the doctors have received formal training in addiction.

The nurses have a mixed training background. Seven have trained as general nurses, six of whom have additional post-graduate qualifications ranging from midwifery, psychiatry and paediatric nursing to diplomas in counselling. Two nurses also have formal training in addiction. There are four social workers, three with specific training in the area of psychiatry. One of

the social workers holds an additional diploma in addiction studies. The two 'therapists' employed at the centre have a background in nursing and hold a diploma in psychotherapy and a certificate in family therapy respectively. There is no formal policy regarding the employment of ex-addicts as staff members. Although none are presently employed and this trend is unlikely to change in the future.

Type of Methadone Treatment Offered

Three methadone treatment types - maintenance, detoxification and 'outreach low dose methadone' are offered. The predominant treatment however is maintenance, which offers methadone over a prolonged period (perhaps indefinitely). Detoxification is by definition offered over a shorter period, generally between 10 days to 3 months. The programme's 'outreach low dose methadone' treatment is part of a harm reduction approach including a needle exchange scheme. The offers low dose methadone maintenance (20 mg/day) which attempts to reduce the need for illicit heroin misuse in chronic drug abusers who are unable to stabilise within the methadone maintenance programme.

Other Related Policies

Routine testing for hepatitis B, C and HIV is provided. The centre has a specific hepatology team which is co-ordinated by a specialist doctor who attends the centre for one session per week. Pre- and post-test counselling is available for all patients tested for HIV. Treatment response for patients who are HIV positive generally involves referral to the local Genito-urinary Medicine Clinic (GUM) and discussion with the patient on the methadone treatment options available. Routine health counselling is offered to all patients, which includes information on HIV, AIDS, hepatitis B and C, sexually transmitted diseases and general health issues. This information is also available in leaflets and posters.

The centre provides free condoms and injecting equipment to patients attending the 'low threshold methadone' clinics.

Process *Admission*

Referrals are accepted from any source, including the courts and police. The average length of time between a patient being referred and being seen for an assessment is between 2-6 weeks.

As the centre subscribes to a Central Register of patients on methadone it is necessary to obtained confirmation of the patient's identity. The primary requirement for admission is current physical dependence on opiates, substantiated through information collected on the patient's current and past drug use, routine medical examination and positive urine test for opiates.

Patients under 18 years old must be accompanied by a responsible adult, however, there is a reluctance to prescribe methadone to adolescents. Patients who have evidence of severe psychiatric disorders, e.g., uncontrolled schizophrenia, may also be excluded.

Formal consent before admission to the programme is not necessary, but a verbal treatment contract between programme staff and the patient is considered good practice. There are cases where a written contract may be indicated and considered as a condition of treatment. As part of a pre-treatment orientation process, patients are given handbooks about the treatment and services offered at the centre.

Assessment

Three members of staff are involved in the assessment process - a doctor, a social worker and a nurse. The doctor is the main interviewer. A number of core assessment components are routinely carried out: drug history, physical medical examination, laboratory investigations, which include Hepatitis & HIV screening, liver function tests and urine toxicology. Chest x-rays and further blood tests (i.e., electrolytes and urea) are conducted if indicated.

Discharge/Re-admission

Should a patient drop-out of treatment and the drop out is associated with failing to comply with the treatment re-admission can be considered. However under such circumstances greater emphasis will be placed on family involvement and consideration given to treatment within an alternative setting (e.g., in-patient unit). If a patient is discharged for disciplinary reasons, e.g., physical violence or drug trafficking on the premises, the case will be reviewed and the patient will not usually be re-admitted for 3 to 6 months.

Content

The programme routinely offers regular counselling, on-site medical and psychiatric care and family therapy. Extra options, such as employment/vocational counselling and other support services, can be offered depending on the patient's needs. The number of mandatory attendances at the programme is determined by the type of treatment being offered and the patient's stability. However, patients must attend the programme daily in all cases if they are undergoing detoxification and, initially, if on maintenance. If the patient is considered to be doing well on maintenance, i.e., stable with no evidence of illicit drug use, "take home privileges" may be granted. If these privileges are given, the minimum attendance at the programme is weekly.

The length of time in detoxification treatment ranges between 10 days to a maximum of 90 days, with no fixed treatment duration for maintenance. Patients receiving maintenance are reviewed periodically and indefinite prescriptions of methadone may occur, where indicated. In general, patients receive a weekly counselling session for approximately 30 minutes duration. Urine specimens are taken randomly for screening, with up to eight samples per month per patient.

Chapter 8 Open access MST programme - Padova, Italy

F Schifano & G Forza

Introduction

The problem of drug misuse in Italy became topical with the arrival of heroin on the 'black market' in 1972-73. At this time the distinction between what constituted 'hard' and 'soft' drugs was highly debatable; a debate recently revived by politicians. Although the majority of patients who attend for treatment are dependent on opiates, misusers of cocaine, LSD and ecstasy have recently started to come forward. The main cities, such as Milan, Rome, Naples and Palermo, record a high prevalence of heroin use. It is estimated that Padova, in the north-eastern part of Italy, has the highest rates of both heroin dealing and consumption.

The development of drug services in Italy has been closely linked with the legal regulations governing drug use at different points in time. A public referendum held in 1993 brought in new administrative measures governing the prescribing and dispensing of methadone. Prior to the referendum the Ministerial Decree 445 of 1990 outlined the restrictions and clinical management of methadone treatment for the opiate addict. The main aspects of the Decree are:

- methadone is only considered a component part of an overall therapeutic programme;
- Addiction Treatment Units (ATUs) should guarantee the provision of methadone treatment;
- methadone treatment is provided for a limited period of time and at the lowest dose necessary to achieve abstinence from opiates;
- methadone is only administered by ATU staff and on a daily basis; and
- the patient has to provide urine samples for screening at least once a week.

There are two significant changes since the referendum was introduced. Firstly, general practitioners (GPs) are now permitted to prescribe methadone (including take home privileges). Secondly, following the limited use of methadone as the only substitute medication for opiate addiction, a large scale, national multi-centre trial has been introduced to assess the efficacy of buprenorphine.

All doctors are permitted to prescribe methadone but, in reality, the majority of prescribing is carried out by doctors working in the National Health Service's ATUs. Prescribing by family doctors, however, is on the increase.

Programme Profile

Staff Profile	7 Doctor s 2 Social workers 4 Psychologists 1 Educator 11 Nurses		
Main Treatment Settings	Out-patient Community Day programme		
Programme Variables	Type of treatment	Detoxification	Maintenance
	Average time in treatment	30 days	12 months
	Average frequency of attendance	Daily	Daily
	Allocation of keyworker	Yes, if requested	
	Methadone dosing & dispensing policy	Range 25-60 mgs	60-140 mgs
	Dosage form	Linctus	
	Dispensing site	Centre only	

Structure

The centre was first opened in 1978 as part of the National Health Service provision and is located within one of the largest health regions in Italy. It is situated within the grounds of the local health unit, with services contained in one building. Although located on the outskirts of the city, the service is still considered to be in an urban environment. Until the summer of 1995, the centre was the only ATU providing a service to a catchment population of approximately 380,000. Recently the catchment area was split into two and consequently a second unit has been established. The centre only provides services for drug addiction and fifty percent of its activities are taken up by MST. There is no limit on the number of places available for treatment; all referrals are assessed and assigned to the appropriate treatment type. The main aims of the service are drug prevention, treatment and rehabilitation.

Staffing

There is a large multi-disciplinary staff, all of whom have a great deal of experience in the field of addiction. Many have been working at the centre for a long time, up to 15 years in some cases. Although there is no academic training in addiction, doctors can attend courses organised and facilitated by the Region. The content of the courses varies and they can run from just one day to one week maximum. Similar courses are run for psychologists.

The doctors come from a variety of training backgrounds ranging from psychiatry to oncology. Some also have post-graduate training in pharmacology. The nurses have a mixed training background, and three trained as psychiatric nurses. Ex-addicts are not usually employed as staff members.

Type of Methadone Treatment Offered

The programme offers detoxification, maintenance and low threshold methadone treatment. The detoxification programme does not generally exceed 3 months. Maintenance is naturally over a longer period of time with harm reduction as the goal. Low threshold methadone treatment involves prescribing of methadone only to patients who do not wish to take part in other aspects of the programme and who persist in using illicit drugs and demonstrate anti-social behaviour. All treatments are offered in an out-patient setting.

Other Related Policies

There is a formal policy on HIV and hepatitis testing which encourages all patients to be tested, although there is no hepatitis B immunisation programme. General health counselling is offered to patients on request. If patients are diagnosed with HIV/AIDS they are referred to a specialist doctor employed by the centre. This is also the case for patients who are hepatitis B and/or C symptomatic. Referral and liaison with the hospital medical services is also carried out.

Process *Admission*

The programme will accept referrals from any source, including family and friends. In the case of the latter, no formal patient case notes will be opened until the patient presents for treatment in person. There is no waiting time, as a 'walk-in system' with a reception doctor on duty to see all new patients is offered.

Patients with primary alcohol problems are not accepted, since there are two other centres in Padova dedicated to alcohol treatment. The primary requirement for admission is current physical dependence on opiates, confirmed through information collected on the patient's current and past drug use, routine medical examination and positive urine test for opiates.

Patients who reside outside the catchment area are not eligible for treatment (unless permission is given by the patient's designated local ATU). In addition to this exclusion criteria, the Regional advice given to all ATUs is not to admit under 16 year olds to methadone programmes.

Patients do not have to give formal written consent before admission to the MST programme, but they do have to engage in a verbal treatment contract. There is no formal pre-treatment orientation process for patients, except for the general information offered at the point of assessment.

Assessment

Assessment is carried out by the doctors within the programme. All new patients are offered an interview with the clinical psychologist and/or social worker, but these interviews are not mandatory or part of the assessment process. Refusal does not affect the patient's entry into treatment. The initial assessment by the duty doctor includes taking a drug history, conducting a physical medical examination and taking a urine sample for drug screening. Follow up appointments are arranged for routine blood investigations, which include hepatitis & HIV screening, liver function tests and electrolytes & urea. Chest x-rays are carried out if indicated. The average time between assessment and start of treatment is one day.

Discharge/Re-admission

Although patients are routinely discharged according to their treatment contract there are no other circumstances which will dictate discharge, including acts of violence, both verbal and physical. Should a patient's behaviour become unmanageable within the programme, alternative arrangements are sought, for example attending the centre less frequently or arranging an alternative dispensing site. If a patient drops out of treatment the case will be reviewed and the patient re-admitted if appropriate.

Content The programme offers predominately maintenance treatment , which includes regular counselling in addition to methadone. Patients undergoing detoxification also receive counselling, on-site medical and psychiatric care, family therapy, employment and vocational counselling and other support services. Mandatory attendance is determined by the type of treatment being offered and the patient's stability. Where a maintenance patient is considered to be doing well, i.e., stable with no positive urine samples for illicit drug use, then he/she can be granted "take home privileges". This arrangement is only offered if a patient has a recognised responsible adult who is prepared to hold the methadone on the patient's behalf. When granted take home privileges, patients must continue to attend the programme at least twice a week. However, this arrangement is very rare.

The duration of treatment is determined by treatment type. For example, patients undergoing detoxification are offered a treatment contract that ranges from 20 days - 90 days. Maintenance has no time limits but periodic progress review of patients is undertaken.

Counselling is offered on a monthly basis, with sessions averaging 40 minutes in duration. Random urine samples are taken to screen for illicit drug use: four specimens per patient per month on detoxification treatment and three specimens per month for maintenance patients.

Chapter 9 MST in Bergamo, Northern Italy

L Tidone, M Riglietta & E Tabotta

Introduction For an introduction to the Italian system please refer to Chapter 8.

Programme Profile

Staff Profile	8 Doctor s 7 Social workers 8 Psychologists 3 Educator 8 Nurses		
Main Treatment Settings	Out-patient In-patient Community Day programme		
Programme Variables	Type of treatment	Detoxification	Maintenance
	Average time in treatment	30 days	4 years
	Average frequency of attendance	Daily	Daily
	Allocation of keyworker	Yes, if requested	
	Methadone dosing & dispensing policy	Range 0-60 mgs	2-130 mgs
	Dosage form	Linctus	
	Dispensing site	Centre only	

Structure The centre, established in 1977 by the Ministry of Health in the Lombardia Region, occupies several floors in a thirty year old building. It is located not far from the main railway station in a busy part of the city of Bergamo. In March 1995, the catchment population increased to 400,000 as a result of a merger with an addiction treatment unit in a neighbouring health service area. The treatment of addiction is the main purpose of the centre, which includes alcohol and eating disorders as part of its remit. The methadone programme comprises approximately fifty percent of the centre's activities. There is no limit on the number of treatment places. The main aim of the service is to carry out prevention, treatment and rehabilitation of drug addicts and alcoholics. Funding is provided by the National Health Service.

Staffing

The Centre has a large multi-disciplinary staff, including 3 educators.* Some staff have up to 19 years experience in the field of addiction and have worked at the centre for up to 15 years.

* The position of the educator is similar to that of a social worker, with similar training (i.e., university diploma/degree) and qualifications. The role of educators is primarily supportive, assisting patients in their rehabilitation. Many educators, once qualified, work with young people, focusing on general health and social issues.

The doctors at the centre include one psychiatrist and one psychoanalyst. The nurses have all qualified as general trained nurses, with the Head Nurse completing in addition, a three year management course. There is considerable input from psychology and social work, and this is reflected in the centre's treatment activities. The majority of staff have received some form of training in the field, however, the content and intensity of the courses are varied. There are no formal university accredited courses in addiction, with most of the training being conducted by either the Health Regions or privately.

Type of Methadone Treatment Offered

The predominant treatment provided is maintenance. If patients do not wish to enter maintenance treatment they can be detoxified over a short period of time, either as an in-patient, day patient or at home. Primarily this is achieved using drugs other than methadone, e.g., clonidine, benzodiazepines, viminol and antidepressants. In addition to detoxification and maintenance, patients can be offered a low threshold methadone treatment and a treatment using antagonists, such as naltrexone.

The period of detoxification does usually exceed 25 days, whereas maintenance treatment has no set completion date. Low threshold methadone is defined as using methadone to retain in treatment those patients with certain conditions (e.g.,, pregnancy, severe medical conditions) who persist in using illicit drugs. The primary aim of the latter treatment is 'harm reduction'. Generally the treatment is offered on an out-patient basis.

The upper dose limits for detoxification and maintenance are not fixed and there are no regulations against dispensing methadone from a community pharmacy but this practice is very rare. Dispensing privileges are offered to patients receiving maintenance treatment in the form of 'take home' and 'holiday take-aways'.

Patients must give formal written consent before admission to the MST programme. Although there is no formal pre-treatment orientation of patients, they are advised of the treatment protocols and encouraged to discuss the treatment package with the staff.

Other Related Policies

The centre has a formal policy on HIV, hepatitis and TBC testing which encourages all patients to be tested. There is also a hepatitis B immunisation programme. General health counselling is offered to patients routinely. If a patient is diagnosed with HIV/AIDS, referral is made to the appropriate medical services. This is also the case for patients who are hepatitis B and/or C symptomatic. The centre provides condoms for all patients free of charge and there is an injecting equipment dispensing machine situated outside the centre's premises.

Process *Admission*

The programme will accept referrals from any source, including the courts. The average length of time between referral and an assessment being carried out is four days.

There are no exclusion criteria. The programme accepts patients who are under 18 years of age, but parental consent must be given before a prescription of methadone is allowed. The primary requirement for admission is current physical dependence on opiates, substantiated through information

collected on the patient's current and past drug use, routine medical examination and a positive urine test for opiates

Assessment

On first contact with the service, the patient is seen by a member of staff for an initial interview, where another appointment for assessment is arranged. A full appointment will be offered approximately one week after referral to the service. Assessment is conducted by three members of staff - a doctor, a nurse and either a social worker or psychologist. The average waiting period between assessment and start of treatment is one week. The core components of a routine assessment are taking a drug history; a physical medical examination, laboratory investigations, which include hepatitis & HIV screening, liver function tests, electrolytes & urea and urine toxicology. Where indicated, patients will have chest x-rays.

Discharge/Re-admission

f a patient becomes violent towards a member of staff or damages the building, he/she will not be discharged but will be prosecuted for any damages caused by the behaviour. If a patient drops out of treatment, the case will be reviewed and the patient re-admitted after three months (this does not apply in emergency cases). The same guidelines apply if a patient fails to comply with his/her treatment, but a more suitable alternative treatment will be considered, if appropriate.

Content

Methadone maintenance is the main treatment provided within the programme. In addition to a methadone prescription, regular counselling, on-site medical and psychiatric care, family therapy, employment/vocational counselling and other support services are provided. Mandatory attendance at the programme is determined by the dose of methadone the patient is receiving and his/her stability. For instance, if a patient has been stable in treatment for a minimum of six months, the following may be granted:

patient receiving less than 20 mg methadone daily - attendance weekly,
patient receiving less than 50 mg methadone daily - attendance twice weekly,
patient receiving more than 50 mg methadone daily - attendance daily.

The frequency of counselling sessions is variable and the average duration of sessions is approximately 45 minutes. Urine specimens are taken randomly for screening, up to four samples per month per patient.

Patients undergoing detoxification are offered a contract ranging from 20-25 days. Maintenance is not restricted by time but, on average, is not less than six months. Each case is periodically reviewed. Should patients wish to reduce and come off maintenance, but begin to relapse, the programme will re-stabilise by increasing the methadone dose. This practice can be repeated as often as necessary.

Chapter 10 The first MST programme in Portugal

I Lopes & I Sarmento

Introduction

In November 1976 , the Portuguese Government introduced comprehensive legislation aimed at controlling the traffic of illicit drugs and providing treatment for drug users. Although this Act was followed by the publication of specific guidelines on treatment, services for opiate users remained limited. The Porto centre was, up until 1992, the only service offering a methadone substitution programme in the country. Between the late 1970s and 1987, responsibility for the provision of treatment services was under the direction of the Office of the Primary Minister, which implemented policy for drug trafficking, prevention and treatment. In 1987, the Minister of Health created treatment centres and, in 1990, the sole responsibility was handed over to the Department of Health. This facilitated the merging of the justice-controlled Centre of Studies and Prophylaxy of Drugs (CEPD) with the three Regional Centres in the Health Ministry. The merged body was renamed the Centres for the Treatment of Drug Dependence (CHTs). In June 1994, the Ministry of Health established the Service for the Prevention and Treatment of Drug Dependence (SPTT) to supervise all treatment centres and, in June 1995, it published a list of Community Addiction Teams (CATs) in the country, including eight CATs in the Direccao Regional do Norte, of which there are three prescribing methadone and one prescribing levo-alpha-acetylmethadol hydrochloride (LAAM*).

In accordance with Portuguese Acts of Law 430/83 and 71/84, only the CATs can administer methadone. There is provision under these laws for other doctors to dispense methadone, but this is only with the authorisation and supervision of the doctors working in the CATs. This regulation has facilitated access to dispensing sites for patients living some distance from the CATs.

Programme Profile

Staff Profile	7 Doctor s 7 Social workers 7 Psychologists 9 Nurses		
Main Treatment Settings	Out-patient In-patient Community Day programme Residential rehabilitation		
Programme Variables	Type of treatment	Detoxification	Maintenance
	Average time in treatment	21 days	2 years
	Average frequency of attendance	Daily	Daily
	Allocation of keyworker	Yes, if requested	
	Methadone dosing & dispensing policy	Range 15-75 mgs	1-120 mgs
	Dosage form	Linctus	
	Dispensing site	Centre only	

* LAAM is a synthetic opioid agonist with actions qualitatively similar to morphine and affecting the central nervous system and smooth muscle. The opioid effect which occurs when LAAM is administered is slower in onset and longer in duration (72 hours) than that of methadone (24 hours). This extended duration of action allows three-times-a-week administration .

Structure The Centre was first established by the Government in 1977 and the methadone programme was introduced the following year, in August 1978. Historically, the centre serves all of the Northern Region (3.5 million), although the majority of the current patient population is from greater Porto (approx. 1.5 million). The methadone programme is sited within the centre, which occupies a government owned seventy year old buidling. It is situated in an upper middle class neighbourhood, not far from the commercial centre of the city, and offers dedicated services for drug addiction. Eighty percent of the centre's activities are taken up by the methadone programme. There is a limit on the number of places available for treatment, with current numbers around 900. The centre's philosophy is to provide treatment for drug addiction and re-integration into society.

Funding is by the Department of Health, with a total annual budget of 186,666,000 escudos (UK£647,112). The methadone programme expends approximately 75% of this budget.

Staffing

Clinical staff are multi-disciplinary, with some staff having up to 25 years experience in the field of addiction and some having worked in the centre for 19 years.

The doctors hold post-graduate qualifications in psychiatry and one of the senior doctors is a trained psychoanalyst. The nurses have undergone general nursing education. Most of the social workers and psychologists are trained in family therapy.

Type of Methadone Treatment Offered

Maintenance is the predominant treatment on offer, although one of the doctors prefers to offer all his new patients detoxification in the first instance. Should this treatment not succeed, transfer to maintenance is considered. Detoxification is prescribed in reducing doses over a short period of time (21 days), the goal being abstinence. Maintenance is characterised by the substitution of heroin for methadone, consisting of a fixed dose prescribed over a long period of time (> 1 year). The programme is offered either in an out-patient setting or within the community. The community setting is limited and must be under the direct supervision of the doctors from the centre

Upper limits on dosage of methadone differ between patients and depend on the type of methadone treatment they are receiving. Patients are 'kept blind' to the dosage prescribed and 'take home' privileges are only offered to patients receiving maintenance treatment and who are stable.

Other Related Policies

The centre provides routine testing for hepatitis B, C and HIV. There is a hepatitis B immunisation programme but, currently, this has a waiting list. An infectious diseases specialist works at the centre twice a week. Pre- and post-test counselling is available for all patients tested for HIV. HIV testing may sometimes be required for admission to the methadone programme. The centre also employs a liver specialist on a sessional basis, who provides treatment and advice to patients positive for hepatitis B and C.

The centre does not provide condoms or injecting equipment but does advise patients on where they may be obtained.

Process Admission

The programme will accept referrals from any source, including the courts and police. The average length of time between a patient being referred and seen for an assessment is between 8-9 months.

The patient's identity is sought and his/her signature is needed if they agree to join the methadone programme. Adolescents who are referred with drug problems will be seen by a separate part of the service that has a primary role of working with women/children and young people. There is a philosophy that young people should not be contaminated with the older/more established drug using population attending the out-patient service. Additionally, patients under 18 years old must be accompanied by a 'tutor'. A tutor is defined as a responsible family member, e.g., mother or father. Patients with primary alcohol problems will be referred on to alcohol-specific services. The primary requirement for admission is current physical dependence on opiates, substantiated through information collected on the patient's current and past drug use, routine medical examination and positive urine test for opiates.

Handbooks about the treatment and services on offer are available as part of a pre-treatment orientation process.

Assessment

The centre has a waiting list, which can result in patients having to wait more than a year before being assessed. Assessment is provided by a number of different teams led by a psychiatrist. Each team is multi-disciplinary and, in addition to a psychiatrist, comprises a social worker and a psychologist. Although the psychiatrist is considered the main assessor there is no single routine assessment procedure in place - it depends primarily on the individual team carrying out the assessment. Core components of the assessment are taking a drug history, carrying out a physical medical examination and laboratory investigations, which include hepatitis and HIV screening, liver function tests, chest x-rays and urine toxicology. Blood screens (i.e., electrolytes and urea) are conducted if indicated.

Discharge/Re-admission

If the patient drops out of treatment or fails to comply with treatment this will precipitate involuntary discharge. Under such circumstances the centre will review individual cases and, if appropriate, place the patient on the waiting list for re-admission. If the discharge is on disciplinary grounds e.g., violence or drug trafficking, the response may range from a reprimand to a six month delay in re-admission. The impact of this latter measure is limited due to the existing extended waiting list.

Content Maintenance is the most frequently offered treatment. In addition to methadone, patients receive regular counselling, on-site medical and psychiatric care, family therapy, employment/vocational counselling and other support services. Mandatory attendance at the programme is dictated by the type of treatment and the client's stability. Patients on maintenance who are considered to be doing well, i.e., stable, no positive urine samples for illicit drug use and, particularly, if employed and/or have family members to take responsibility for the methadone, will be granted "take home privileges". This applies to approximately 20-30% of current patients (n = 900). Patients who are offered this option must attend the centre at least once every fifteen days.

The duration of time spent within the programme is dependent on the type of treatment undertaken. Patients undergoing detoxification will be offered a treatment contract which will include a methadone prescription of no more than 21 days. Maintenance is not restricted by time but a patient's progress is kept under review.

Counselling sessions do not exceed 15 minutes in duration. The frequency of these sessions differs between patients in detoxification and those on maintenance, with the former seen bi-weekly and the latter weekly. Urine specimens are taken randomly for screening of illicit drug use, up to two samples per month per patient.

Chapter 11 Primary Health Care within an MST programme - Barcelona, Spain

M Torrens, C Castillo & L San

Introduction

The emergence of drug problems in Spain began towards the end of the 1970s with the primary drug of concern being heroin. More recently, this concern has grown to include ecstasy as its use has increased. Treatment and service development, instigated and supported by the introduction of the National Plan for Drugs in 1985, has been gradual and somewhat delayed compared to the rest of Europe. Prior to a Ministerial Order in 1983, the use of opioids was restricted to the treatment of terminally ill patients. Following the new legislation, doctors were permitted to prescribe oral methadone for the treatment of opiate addiction. However, the majority of prescribing by doctors was located within the private sector and concern was expressed that, in some cases, private doctors were treating opiate addicts for personal gain. In response, a Ministerial Order in 1985 restricted the prescribing of methadone within the private sector and established methadone prescribing within designated dispensing centres under the control of the Administration. Consequently, a decrease in the number of patients receiving methadone was observed. The Ministerial Order was further amended in 1990, prompted by data on the number of drug addicts positive for HIV and AIDS. The Order permitted the prescribing and dispensing of methadone simultaneously. This significantly facilitated the engagement of drug addicts into treatment and numbers have been increasing to date, estimated to be approximately 15,000 in 1995.

To prescribe methadone in Spain, a doctor must be working in a designated specialist centre licensed for providing methadone treatment. Once a doctor makes the decision to prescribe, he/she must notify the regional regulating authority, advising the commencement and termination date of treatment for each case. There are no restrictions on dosage nor on the form in which methadone is dispensed, and duration of treatment is decided by individual centres.

Programme Profile

Staff Profile	6 Doctor s (1 family doctor) 2 Social workers 11 Nurses	
Main Treatment Settings	Out-patient In-patient Day programme Residential rehabilitation	
Programme Variables	Type of treatment	Maintenance
	Average time in treatment	5 years
	Average frequency of attendance	6 days per week initially and then twice weekly if stable
	Allocation of keyworker	Yes
	Methadone dosing & dispensing policy	Range 20 mgs - no limit
	Dosage form	Linctus/syrup
	Dispensing site	Centre only

Structure

The centre was established in 1981 as part of the public Hospital del Mar. The Addiction Service comes under the management of the General Psychiatric Department of the hospital. The drug addiction out-patient service, where the out-patient methadone programme is sited, is close to the main hospital and has been purposely designed and decorated to the needs of the service and patients. There is also an in-patient unit sited nearby, which is a self-contained ward offering detoxification. It has 6 beds for opiate dependent patients and 2 beds for alcohol dependent patients. The catchment area, approximately 80,000, covers only one part of Barcelona (i.e., the old part of the city). The city itself has eight centres providing treatment for drug addiction. The Hospital del Mar Centre is considered to be the most 'medicalised' of the eight. The reason for this is attributed to the type of patient population presenting to the service. There is a high percentage of co-morbidity (e.g., substance misuse and psychiatric/medical problems), 70% HIV positivity and 25-30% suffering from tuberculosis. The area served by the centre is recognised as one of the most deprived in the City, with high unemployment, social problems, prostitution, immigrant and transient populations. The programme is only able to offer a total of 160 places for methadone treatment, as it does not believe that it can safely provide treatment to more than this number, considering the staffing levels.

In addition to the services provided by the centre there is a 'Methadone Bus'. This is operated by a private medical company, which employs nurses. Although privately managed, funding is received from the public purse. This bus provides a service to the entire City, with 40 places allocated to each of the eight centres. The Hospital del Mar Centre has a waiting list for the bus, as well as for the out-patient programme.

The centre is funded through the national health service and treatment is provided free at the point of entry. The total estimated annual budget is 65 million pesetas (UK£271,852), with approximately 60% spent on the methadone programme.

Staffing

There is a large multi-disciplinary staff which includes eight doctors - five of whom are allocated to the out-patient service and three to the in-patient unit, eleven nurses - four allocated to the out-patient service, and two social workers. Some of the staff have worked in the field of addiction for up to 15 years, and at the centre for up to 11 years. Three of the doctors hold a post-graduate qualification in psychiatry and one doctor is a trained general practitioner. The majority of the doctors have completed a two year training course in addiction at the Hospital del Mar. The training background for nursing is mixed, i.e., general and psychiatry, with no nurse or social worker receiving formal training in addiction. There is a policy which does not permit the employment of ex-addicts to work at the centre.

Type of Methadone Treatment Offered

Although, in principle, the programme provides detoxification treatment, in practice, all the treatment places are taken up by patients on maintenance. Patients who wish to detoxify are offered a place on the in-patient unit. Naltrexone and drug free programmes are also available in the out-patient setting.

Detoxification occurs over a short period of time, restricted to between 3-5 weeks, while maintenance is over a prolonged period with no set completion date. The programme is provided from out-patient and in-patient settings.

Patients are not informed of the prescribed dosage and receive their methadone in a pre-determined volume of liquid. Arrangements can be made for patients to have 'take home' privileges, but this will only be granted to patients who have negative urine samples for heroin over a three month period. Holiday 'take-aways' can also be arranged for patients who are stable.

Other Related Policies

All patients are encouraged to be tested for HIV and hepatitis. There is also a hepatitis B immunisation programme. General health counselling is routinely offered. If a patient is diagnosed with HIV/AIDS, he/she is monitored by the family doctor working at the centre. Patients with a CD4 count of less than 500 will be automatically referred to the Infectious Department of the hospital. Patients with a CD4 count of greater than 500 are regularly reviewed every six months within the centre. The policy for hepatitis B and C patients is similar: if positive and symptomatic, they will be referred for treatment locally, otherwise they are monitored within the centre. The family doctor at the centre is the designated liaison doctor when the patients have been referred to the general hospital. The centre also provides free condoms and injecting equipment.

Process

Admission

The programme accepts referrals from any source, including the courts and police. The average length of time between referral to the Centre and assessment is ten days. Patient's identity is sought, as the centre must notify the local regional regulating body when treatment commences. The primary requirement for admission is current physical dependence on opiates, substantiated through information collected on the patient's current and past drug use, routine medical examination and a positive urine test for opiates

Patients who reside outside of the centre's catchment area will be referred to their appropriate services. Patients must give formal written consent before admission to treatment. Although there is no formal pre-treatment orientation of patients, they are advised of the treatment protocols and encouraged to discuss the treatment package with staff.

Assessment

Assessment involves four members of staff: a psychiatrist, family doctor, nurse and social worker. Methadone is not normally prescribed immediately, due to the existence of a waiting list. If immediate prescribing is indicated, however, the decision is taken by the psychiatrist before the assessment process is completed. The assessment process is structured with designated roles for each discipline. The team meets weekly to review the new referrals and assessments. Due to the pressure on places for treatment, the programme currently has a waiting list of approximately three to four months. If the programme was to put every patient requesting maintenance treatment on this list, the waiting period would extend to one year. To avoid such long waiting times, attempts to offer alternative programmes to the patients are made, for example, detoxification as an in-patient or referral to a therapeutic community.

A number of core assessment components are carried out for every assessment. These include a drug history; physical medical examination; laboratory investigations, including hepatitis & HIV testing, liver function tests and electrolyte, urea, and urine toxicology. Chest x-rays are conducted if indicated.

Discharge/Re-admission

Drop-out of treatment or failure to comply with the treatment programme does require review before re-admission can be considered. However should a patient be discharged for disciplinary reasons, for example physical violence or drug trafficking on the premises, he/she will not be re-admitted

Content Maintenance is the main treatment offered. This includes on-site medical and psychiatric care. Mandatory attendance is expected for the first three months. Should the patients' urine samples remain free of illicit drug use, then twice weekly attendance will be granted. Patients who are stable in treatment and want to go on holiday can have an allowance of methadone for up to 15 days.

No formal individual therapy (counselling) is offered, although patients are seen regularly by the doctor for clinical management. Patients who are attending once a week and are stable will only see the doctor once every six months for review. Urine specimens are taken randomly for screening, up to three samples per patient per month.

Chapter 12 MST provision in Oviedo, Northern Spain

M Montes

Introduction Please refer to Chapter 11 for an introduction to the Spanish system.

Programme Profile

Staff Profile	2 Doctor s 1 Social workers 3 Nurses	
Main Treatment Settings	Out-patient Community	
Programme Variables	Type of treatment	Maintenance
	Average time in treatment	No definitive period
	Average frequency of attendance	4 days per week
	Allocation of keyworker	Yes
	Methadone dosing & dispensing policy	Range 35 mgs - no limit
	Dosage form	Linctus
	Dispensing site	Centre only

Structure The centre was established in 1986 and is part of the public Mental Health Unit facilities for the area of Oviedo. It is purely dedicated to providing services for opiate users, that is, it is solely a methadone programme. Patients with other addiction problems are seen by staff within the General Mental Health Unit. The catchment population of the centre is located in the eastern part of the Region, the municipality of Oviedo and greater Oviedo. This is the most rural area of the Region with a highly dispersed population. It is also a popular tourist attraction and has many visitors during the summer months. Oviedo is a university town and consequently has a high transient student population. The total population is estimated at 300,000. The centre's aims are consistent with those of the other services in the Region: primary and secondary prevention of substance misuse, improved quality of life and treatment of opiate addiction using methadone. Funding is provided by the national health service.

Staffing

The centre's staff have worked in the field of addiction for up to 12 years and at the centre for up to 7 years. The two doctors are both physicians and hold a two year post-graduate masters degree in addiction. There are three psychiatric trained nurses with no formal training in the speciality. The social worker is part-time. Access to other disciplines is through the General Mental Health Unit, which provides psychiatric and psychological services.

Type of Methadone Treatment Offered

The programme offers only maintenance treatment, with no set completion date. It is offered within an out-patient setting, although arrangements can be made for home visits to patients who may be too ill to travel to the programme, e.g., AIDS sufferers.

Other Related Policies

All patients are encouraged to be tested for HIV and hepatitis. There is also a hepatitis B immunisation programme. General health counselling is routinely offered, including pre- and post-test HIV counselling. If a patient is

diagnosed with HIV/AIDS, he/she is offered psychotherapeutic support and is referred to the Infectious Control Services. The policy for hepatitis B and C patients is similar: if positive and symptomatic they will be referred for treatment locally, otherwise they are monitored in the programme. The centre provides free condoms, but not injecting equipment, for all patients.

Process

Admission

The programme only accepts referrals directly from the Mental Health Unit (MHU), which assesses patients and decides whether or not to refer. The MHU can be accessed either via the family doctor or directly by the patient. Although the staff at the MHU do not have any formal training in addiction, they work closely with the staff from the methadone programme. If the patient's needs do not warrant methadone treatment, or if the patient does not wish to enrol for this type of treatment, then he/she can remain within the MHU. The average length of time between referral to the centre and assessment is seven days.

The patient's identity is sought, as the centre must notify the local regional regulating body when treatment commences. The primary requirement for admission is current physical dependence on opiates which is confirmed through information collected on the patient's current and past drug use, routine medical examination and positive urine test for opiates.

Patients must give formal written consent before admission and are provided with a handbook as part of the pre-treatment orientation. Patients under 18 years old are not accepted on the programme. Under such circumstances referral will be made to the child/adolescent services. Equally, patients who are non-opiate drug users will not be accepted for treatment.

Assessment

Following referral to the service, and in addition to the initial assessment interview with staff from the MHU, patients will be offered an appointment to be seen by one of the doctors and nurses from the methadone programme for a second interview and assessment. The centre has adopted a Methadone Treatment Protocol, which was developed and agreed in collaboration with colleagues from the other eight regional treatment centres. The main components of the routine assessment include taking a drug history; conducting a physical medical examination and carrying out laboratory investigations, such as hepatitis & HIV screening, liver function tests, electrolytes & urea and urine toxicology.

Discharge/Re-admission

There are certain factors which will precipitate involuntary discharge from the programme. These include physical violence, drug trafficking on the premises and repeated positive urine samples for illicit drug use. In all cases, the centre's policy is to review each individual case and re-admit if appropriate.

Content

The programme offers maintenance treatment only. This includes regular counselling, on-site medical and psychiatric care and family therapy. Detoxification following a period of maintenance (minimum of one year) is encouraged where the following factors are evident: social support in the community, stable employment, definite goals for the future, good physical health and absence of high risk behaviour.

If a patient is too ill to attend, a family member is permitted to collect the methadone or a home visit can be arranged. Patients in employment are allowed to attend for consultation at the weekend. Patients must see the doctor for follow-up at least once a month. The consultation is approximately 45 minutes in duration. Contact with the 'keyworker' is not mandatory. Urine specimens are taken randomly for screening, between 2-4 samples per patient per month

Chapter 13 Multiple-site MST programmes - Geneva, Switzerland

M Bourquin

Introduction

Concern regarding the escalating drug problem in Switzerland remains high on the political and clinical agenda. It is estimated that the country has in excess of 25,000 drug addicts, many of whom are multiple drug users. Historically, the country has had a somewhat tolerant view to illicit drug use, with the existence of open drug scenes in many of the cities. This situation has recently been tackled, however, with authorities taking action and closing them down.

Matters related to drug control fall under the jurisdiction of the Pharmacy Division within the Federal Office for Public Health. The Swiss drug policy is formulated by the same Office. The implementation of related health and social care is carried out by the twenty three cantons and their cantonal health authorities.

Like many of its counterparts in Europe, Switzerland has experienced high levels of HIV/AIDS infection; indeed, until recently it had the highest HIV infection rate. Due to the obvious link between HIV and drug misuse, public pressure has been increasing for the authorities to find solutions.

Methadone was first introduced into Switzerland in 1976 and, subsequently, into the Geneva Centre in 1977. The legal framework, organisation and scope of methadone treatment differs across the twenty three cantons. With respect to the jurisdiction within which the Geneva Centres falls, the following conditions apply:

(1) Before treatment commences and during the assessment phase, the patient and doctor must complete a public health questionnaire. This form is returned to the Public Health Department for authorisation to prescribe. (2) The patient must sign an agreement for methadone treatment. This information is collated centrally and kept on a register. The rationale for this approach is to reduce 'double prescribing'.

To establish a methadone programme there must be a doctor responsible and employed to prescribe. Should a family doctor wish to set up such a programme, then he/she is only permitted to treat up to ten patients. Further patients can be taken on, providing there are sufficient staff, i.e., 10 patients per one member of clinical staff.

* Swiss Methadone Report. Narcotic Substitution in the Treatment of Heroin Addicts in Switzerland . 3rd Edition. Swiss Federal Office of Public Health and Addiction Research Foundation. 1996

Programme Profile	**Staff Profile**	4 Doctor s 1 Social workers 5 Psychologists 3 Nurses 2 Educators 7 Medical assistants		
	Main Treatment Settings	Out-patient		
	Programme Variables	Type of treatment	Detoxification	Maintenance
		Average time in treatment	21 days	2 years
		Average frequency of attendance	Daily	Daily
		Allocation of keyworker	Yes	Yes
		Methadone dosing & dispensing policy	Range 15-75 mgs	1-120 mgs
		Dosage form	Tablets dissolved in syrup	
		Dispensing site	Community pharmacy	Centre only

Structure

Fondation Phenix was formally established in 1984 and has a management structure with a Council. The Council is made up of five people including a doctor, a judge, a health insurance manager and a banker.

The centre is comprised of four sites (A, B, C and D). Site D is situated within the inner city and the remaining centres are closer to the suburbs. Although the centre does not operate within a certain catchment area, in practice, the majority of patients reside within the boundaries of Geneva, which has a population of approximately 400,000. The centre has the capacity to treat up to 400 methadone patients.

The main aim of the centre is to provide medical treatment for addiction problems. Psychological support, both individual and group, is offered, with options for social reintegration through retraining/vocational support. Primary care can also be offered if the patient is not registered with his/her own family doctor.

The health care system in Geneva is such that patients must pay for their treatment directly to their doctor. However, ninety percent of this is recoverable through their medical insurance policies. Where a patient is unable to pay for treatment, it is the responsibility of the Social Services to provide financial support. Fondation Phenix has established a special arrangement with insurance companies which permits the centre to receive payment directly, thereby bypassing the patient and preventing diversion of the money for illicit drug use.

To compensate for the ten percent not paid for by the insurance companies, patients attending the centre are expected to make a contribution. Initially they are asked to pay eighty Swiss Francs a month (UK£34). When the treatment programme is less intense, this is reduced to sixty Swiss Francs a month (UK£25) when attendance drops to twice a week, and to forty Swiss Francs (UK£17) when attendance is set at once a week. Very few patients fall into the latter category.

In addition to the medical insurance and patients' contributions, the centre receives funding from charitable sources and City Councils.

Staffing

The centre operates a multi-site programme with different staffing patterns in each site. Each site has a doctor, three of whom assume the role of director for the site. The fourth site has a psychologist as a director. The centre is staffed by experienced workers, some of whom have been in the field of addiction for up to 25 years and working at the centre for up to 16 years.

The doctors come from different training backgrounds. There is one psychiatrist, an internist and two family doctors. Most of their addiction training has been received through clinical training, rather than formal post-graduate diplomas, certificates, etc. Two of the nurses have the role of Head Nurse, one of whom is general trained, the other psychiatry trained. The third nurse is in a staff position and is general trained. Two of the five psychologists occupy director and co-director positions, respectively, and only one of them works full-time. Medical assistants must undergo formal training, either two years full- time or three years part-time. This qualifies them to assist the medical practitioner in his/her duties, ranging from administrative responsibilities (e.g., making appointments) to laboratory work. The medical assistants working in the Fondation Phenix Centre have all received additional training which equips them to assist in the dispensing of methadone to patients. This discipline is more prevalent in Switzerland than nursing. The role of educator is similar to that of a social worker and normally requires three years of training.

Type of Methadone Treatment Offered

Maintenance treatment can be defined as a daily methadone dose, which produces a 'blocking effect', for a prolonged period with no set completion date. Detoxification on the other hand can be defined as the use of methadone to withdraw a patient off heroin over a short period of time, not exceeding six weeks. This latter form of treatment is seldom provided by the programme and is generally offered only under special circumstances (e.g,, when going on vacation or enlistment in the army). The programme is offered in an out-patient setting.

Dispensing arrangements are either on-site during the week or through the local community pharmacy at week-ends. Arrangements can be made for patients to receive take-home privileges when stable.

Other Related Policies

The centre has a formal policy on HIV and hepatitis testing which encourages all patients to be tested. HIV testing is carried out, with the patients' consent, twice a year for research and monitoring purposes. There is also a hepatitis B immunisation programme which is offered free of charge by the State. Patient uptake is very good and it is estimated that one in four patients attending the centre have received the vaccination. General health counselling is routinely offered. Patients diagnosed positive for HIV/AIDS and/or hepatitis B and C will be referred to the appropriate medical services . Care will, subsequently, jointly be provided by the medical services and the centre. Interferon treatment for hepatitis C is not available via medical insurance, but may be available through research protocols in the hospitals.

The centre does not provide condoms, but advises patients on where to obtain them. Injecting equipment can be given free of charge, but its distribution is uncommon.

Process

Admission

The programme accepts referrals from any source, including from a State Public Health Officer. The average length of time between referral and assessment is 2-3 days. Patients seeking re-admission (i.e. known to the service) are given an appointment immediately.

The patient's identity is sought, as the patient must give written permission to take part in the methadone programme. Permission to prescribe must also be granted by the State Public Health Officer. The primary requirement for admission is current physical dependence on opiates, confirmed through information collected on the patient's current and past drug use, routine medical examination and positive urine test for opiates.

Pre-treatment orientation of patients takes the form of handbooks about the centre and treatment protocols. This is supplemented with general information from staff.

Patients using other drugs in addition to opiates, particularly those using benzodiazepines, may be excluded from the programme until they have undergone detoxification for other drugs. Once detoxified, they can be accepted for maintenance treatment. The admission of patients under 18 years old requires more careful consideration.

Assessment

Following referral to the service, patients are seen by one member of staff for assessment. Following the assessment, a team meeting is held to review the patients' referral and agree on their admission to the programme. A medical examination is not carried out routinely, as this responsibility lies with the patient's family doctor, unless indicated. General laboratory investigations, including HIV & hepatitis testing, are carried out routinely every six months with patient consent, as part of ongoing monitoring/surveillance. These tests are not generally carried out at the start of treatment, as experience has shown that patients often have few veins due to intense injecting practices. The average time period between assessment and commencement of treatment can range from immediate (i.e., seeking re-admission) up to three days.

Discharge/Re-admission

If a patient drops out of treatment, he/she is eligible for immediate re-admission. If a patient fails to comply with the terms of treatment, he/she can be re-admitted with a review and discussion of the last treatment episode. If a patient is discharged for disciplinary reasons, e.g., physical violence or drug trafficking on the premises, the patient will not be re-admitted but may be referred to another centre.

Content

Maintenance treatment is the more common treatment offered within the programme. It includes regular counselling, on-site medical and psychiatric care, family therapy, employment/vocational counselling and other support services. Mandatory attendance at the programme is determined by the type of treatment and the client's stability. Arrangements for week-end dispensing are in place with a local community pharmacy, which dispenses the methadone on-site and under supervision. Initially, maintenance patients must follow the same routine as detoxification patients until stability is achieved. Then, attendance is gradually reduced to three times a week, or less if stability is maintained. To ensure that the methadone dispensed is the methadone being consumed by the patient, ad hoc

checks are carried out by adding 'tracers' of phenobarbitone to the patient's weekend supply and testing his/her urine sample the following Monday.

Patients undergoing detoxification will be offered a contract ranging from 28 days to 90 days. The expected minimum duration of maintenance treatment is six months, but patients are kept under review and may receive a prescription indefinitely. Indeed, should patients begin to reduce their dose and test positive for illicit opiates, their methadone dose is increased until the illicit use stops.

Patients see their keyworker for counselling twice a week if on the detoxification regime and twice a month if on maintenance. Counselling sessions last for approximately 20 minutes. Urine specimens are taken randomly for screening, up to eight samples per patient per month.

Chapter 14 MST - A British experience

C Clancy & G Tregenza

Introduction

The first statutory response to drug misuse in the United Kingdom was the Defence of the Realm Act Regulations, which were introduced in 1916. Between this date and 1967, various attempts were made to control illicit drug use, however, it was the introduction of the Dangerous Drugs Act of 1967 which had the most significant impact on the development of specialised treatment responses. This Act established a compulsory system of notification of addicts (stopped in April 1997), the introduction of special licensing of doctors to prescribe controlled drugs and special clinics to manage the treatment of drug addicts. One of the treatment packages available was methadone substitution therapy.

The last ten years has seen further changes in drug services in response to the advent of HIV and AIDS. More recently, drug abuse has become a priority on the Government's agenda, with the publication of a second national drugs strategy 'Tackling Drugs To Build a Better Britain' (April 1998) and an ongoing national study on the effectiveness of treatment for drug addicts.

Currently, treatment for addiction is offered by general practitioners (GPs), specialised drug clinics or community drug teams, secondary psychiatric services and specialist in-patient services. These services are located both in the private and public health sectors. Referral to residential/recovery units can either be made by one of the above treatment services, and/or social services.

Under the Misuse of Drugs Regulations 1985, the professional groups (e.g., midwife, doctor) authorised to possess or supply controlled drugs and the situations in which they are permitted to do so are defined. Methadone is a Schedule II drug and its safe custody must be ensured. A register must be kept to record the use of the drug and prescriptions must conform to precise legal requirements. Special arrangements exist when methadone is prescribed for the treatment of dependence, for instance, guidelines on good practice advise that the drug is only dispensed on a daily basis. To assist doctors in keeping within the regulations under Schedule II, a prescription form, FP10 (MDA), has been introduced to enable GPs to write a prescription for several days' treatment on a single form, to be dispensed in instalments. These arrangements have also been set up for doctors in specialised treatment centres. A Department of Health publication specifying standards among medical doctors involved in prescribing methadone is currently under review and is due to be published in 1999. It is proposed that the new Guidelines will make recommendations governing special licensing arrangements for the prescribing of methadone.

Programme Profile

Staff Profile	7 Doctor s 5 Social workers 2 Psychologists 43 Nurses 2 Occupational therapists		
Main Treatment Settings	Out-patient In-patient Community Residential rehabilitation Day programme		
Programme Variables	Type of treatment	Detoxification	Maintenance
	Average time in treatment	21 days	2 years
	Average frequency of attendance	Daily	Daily
	Allocation of keyworker	Yes	Yes
	Methadone dosing & dispensing policy	Range 15-75 mgs	1-120 mgs
	Dosage form	Tablets dissolved in syrup	
	Dispensing site	Community pharmacy	Centre only

Structure

The methadone programme is situated within the Pathfinder Addiction Services (A major National Health Service agency responsible for providing mental health services to part of London). The addiction services comprise hospital based out-patient clinics, in-patient assessment, detoxification, recovery and rehabilitation wards and community based multi-disciplinary therapeutic teams. The local catchment population served is 615,000, however, the Centre also provides a regional tertiary assessment and specialist in-patient service to a population of over three million. There are no limits on the number of treatment places for out-patient and community services. Patients requiring in-patient treatment are limited to twelve assessment and detoxification beds and eleven recovery beds. Approximately seventy-five percent of the Centre's activities are taken up by methadone programmes.

The Clinical Service describes its' broad aims as the provision of health and social care for individuals experiencing problems with substance misuse and support for those affected by it, i.e., family and friends.

The Centre is funded by the National Health Service. The total annual budget is approximately UK£3.4 million.

Staffing

The Centre has a large multi-disciplinary staff with clinical responsibility for the service held by a senior psychiatrist. The doctors, in addition to their general training, hold a post-graduate qualification in psychiatry, and one or more other post-graduate qualifications. Training in addiction is included in the overall educational curriculum for psychiatry. As the centre is attached to a teaching hospital, some doctors hold training positions. The training background for nursing is primarily psychiatry. Of the twenty- six nurses formally trained in addiction, five hold either MSc, diploma or certificate level training in the speciality. The majority of nurses and other clinical staff attend in-service training programmes.

The centre is operationally divided into three borough teams and a high support service. Although the service does not currently have any staff member who is an ex-addict, there is a policy which permits their employment. They must be able to demonstrate that they have been drug free for a minimum of five years.

Type of Methadone Treatment Offered

The centre provides methadone maintenance and detoxification treatments. Detoxification is defined as the substitution of opiates for methadone where there is a clearly defined goal from the outset of treatment. The dose is gradually reduced over a short period of time, ranging from three weeks to six months. Maintenance is defined as the substitution of opiates for methadone on a continuous basis with regular reviews. There is no defined time period.

There is a small number of patients who have been in long-term maintenance treatment and continue to receive methadone in its injectable form. Dispensing is initially carried out on-site (from the hospital pharmacy) while the patient is undergoing stabilisation; once this has been achieved, arrangements are made for patients to collect their methadone daily from their local community pharmacy. This arrangement will be reversed if patients become unstable. Then they will be expected to attend the programme daily and pick up their methadone from the hospital pharmacy.

Flexible dispensing arrangements can be made, depending on the patients' needs and their stability within the programme. For instance, prescriptions can be arranged so that a patient can pick up 2-3 days supply to reduce his/her attendance at the pharmacy or to go on holiday.

Other Related Policies

The centre has a formal policy on HIV and hepatitis testing which encourages all patients to be tested. In addition there is a hepatitis B immunisation programme. Some of the members of staff have specific responsibility for HIV related issues and provision of pre- and post-test counselling. This service is part of a general health counselling programme that all patients receive on admission to the programme. If a patient is diagnosed with HIV/AIDS, there is a special clinic within the general hospital where patients are referred. The centre works closely with this service. This is also the case for patients who are hepatitis B and/or C symptomatic. Referral and liaison with the patient's family doctor and/or hospital medical services are also carried out. The centre offers free condoms. A needle and syringe exchange programme is offered only by the community service.

Process *Admission*

Admission to the methadone programmes depends on the setting, e.g., out-patient, in-patient or community. The general policy is that referrals are accepted from any source, including the courts and police. In the out-patient clinic a 'walk-in' service is provided*. The average length of time between referral and assessment is two days.

The patient's address is sought, as referrals will only be accepted if a patient resides within the catchment area. The primary requirement for admission is current physical dependence on opiates, substantiated through information collected on the patient's current and past drug use, routine medical examination and positive urine test for opiates.

* Patients can be seen immediately without an appointment.

Patients under 16 years old can be accepted for treatment but are also referred to the child/adolescent mental health services. In cases where the patient has been identified as resident outside of the catchment area, the centre will ensure onward referral to appropriate services.

Patients must give formal written consent before admission to the programme. Although there is no formal pre-treatment orientation of patients entering out-patient/community settings, treatment protocols are explained to the patients and they are actively involved in discussing their treatment package with the team. There is a formal Pre-Resident Engagement Programme (PREP) for patients due for admission to the in-patient unit. The in-patient setting is also able to accept admission of a mother needing detoxification and her child (up to 1 year old).

Assessment

The assessment process varies according to the setting. Generally, assessment is multi-disciplinary, comprising a doctor, nurse and social worker. Once the patient has been assessed, this team meets to review the case and discuss a treatment package. This is subsequently discussed with the patient and his/her family, where appropriate. The waiting time between referral to the Centre and an appointment ranges between 1 to 7 days. There is a system in place where patients known to the Centre and returning for treatment can be seen more rapidly. A number of core assessment components are routinely carried out for every assessment. These are taking a drug history, physical medical examination and laboratory investigations, including hepatitis & HIV screening, liver function tests, electrolytes, urea and urine toxicology. Chest x-rays will be conducted where indicated.

Discharge/Re-admission

If a patient drops out of treatment or fails to comply with the terms of treatment, the case will be reviewed and the patient may be re-admitted after a period of six months (this does not apply in emergency cases). If a patient is discharged for non-compliance reasons, e.g., physical violence or drug trafficking on the premises, the case will be reviewed and the patient could be re-admitted or banned from the centre. In the latter case, arrangements will be made for the patient to be referred to another service.

Content The majority of activities centre around maintenance treatment. This includes regular counselling, on-site medical and psychiatric care and family support. Extra options, such as employment/vocational counselling and other support services, can be offered depending on the patient's needs. Mandatory attendance at the programme is determined by the type of treatment setting and the patient's stability.

Out-patients must initially attend the programme daily. Following the stabilisation process, and depending on the patient's treatment contract, an individual treatment package will be established. Accordingly, the patient may take part in a day programme (i.e., attendance five days a week) or have less frequent contact. Generally, patients who are very much at the beginning of their treatment will have more intense contact with the service.

Patients receiving in-patient treatment have a more intense care package which involves individual counselling, group work, vocational advice and support.

Duration of treatment depends on the type of treatment. Patients undergoing detoxification are offered a contract ranging from 30 days to 90 days as an out-patient and 7 days to 21 days as an in-patient. There are no time limits for maintenance. Patients usually attend weekly to see their doctor or key worker for review and counselling. These sessions are 30 minutes in duration on average. Urine specimens are taken randomly for screening, up to 4 samples per month per patient.

Section II

The Way Forward

Chapter 15 Commonalities and variations across MST programmes in Europe

C Clancy, A Oyefeso & AH Ghodse

Commonalities

The introduction of methadone substitution treatment (MST) to the countries of the group began in the late 1960s, with the exception of France and one of the centres in Spain, where a large gap exists between the years of introduction to country and centre. Most programmes are pioneers of MST in their countries

Programme Biographies

With the exception of Ringkøbing, programmes are located in urban centres. The majority have established links with hospital services and family doctors. Two of the programmes are situated within university hospital premises. Apart from Geneva, programmes fall within the statutory health or social service sector, with the majority receiving their funding centrally from Health Departments.

Most of the programmes operate in single sites and are situated or managed within local Mental Health Units, reflecting where the responsibility for substance misuse treatment lies in that country. Consequently, programmes are led by medical doctors, who are predominantly psychiatrists. The programmes in Denmark are an exception, as the director of services in both centres are psychologists and main stream funding is provided by the social service sector.

The programmes' aims focus on: treatment and rehabilitation/reintegration of patients. The scope of each programme in achieving the operational aspects of these aims is, however, constrained by available resources.

Staffing Patterns and Training

The following disciplines were represented in most centres: nurses, medical doctors, social workers, psychologists, educators, medical assistants, and other therapists. Nurses were the largest discipline represented; this staffing pattern is heavily influenced by the attachment of in-patient units to some of the centres. The two centres whose staffing patterns were notably different were Arhus and Ringkøbing, in Denmark, which draw their personnel from social work and psychology. Employment of ex-addicts as programme workers is not common. Currently, only the Arhus Centre in Denmark has an ex-addict working on its staff.

Formal training (i.e., post-graduate degree) in addiction is uncommon. Most of the staff within the group have developed their knowledge and skills through many years of clinical practice and experience, rather than through any formal specialist training. The majority of medical staff obtain addiction knowledge and skills as part of their post-graduate training in psychiatry. There is a general consensus in the group that training in the speciality is low on the list of priorities of responsible post-graduate/professional education bodies in medicine, nursing, social work and psychology.

Most programmes offer training for staff development and encourage placements from a variety of disciplines, as reflected in their staff programmes. Of the programmes surveyed, only five specifically contribute to undergraduate education in medicine and nursing.

Interagency Collaboration

All the programmes are involved in interagency collaboration and recognise that care and treatment of opiate addicts demands input from a range of professionals. The nature, frequency and intensity of these activities, however, depend on local resources and structures. The most frequently reported interagency activities were contacts with other medical services (including HIV and obstetric services). Other contacts included the legal services (i.e., courts, probation, police); other drug services (i.e., statutory and voluntary sector); and social services. Contact with schools was rare.

Toxicological Services

An essential component of MST programmes is to verify the type of drugs used by patients through urinalysis. The two most commonly used screening methods reported were Enzyme Immunoassay (EMIT) and Thin-Layer Chromatography (TLC).

Treatment Practices

The majority of programmes offer MDT and MMT, with MMT as the main treatment option. All the programmes in the group agree on five basic components of MST. Table 2 outlines these basic components.

TABLE 2 Basic Components of MST Programme

Components	MDT	MMT
Treatment Duration	Defined period of time (i.e., generally not exceeding 90 days)	No set completion date
Setting	Residential and community	Community only
Dosage Level	There are limits on the maximum doses prescribed	No upper limits on the dosage prescribed
Goal of treatment	Abstinence	Harm reduction
Frequency of attendance	Daily	Flexible

Most programmes carry out multi-disciplinary assessment using standardised instrument(s), with the medical doctor occupying the lead role. All programmes provide oral preparation of methadone, with on-site dispensing, and the majority offer take-home privileges to patients who can demonstrate stability.

HIV/AIDS and Hepatitis

All centres provide patients with information and, if necessary, care in relation to HIV/AIDS (including the provision of free condoms) and hepatitis. The majority of programmes offer HIV testing facilities and hepatitis B and C testing, either as part of their routine assessment process or as part of their six monthly monitoring programmes. They also offer hepatitis B immunisation, for which two centres have waiting lists.

Variation *Staffing Patterns and Role Definition*

Although the disciplines involved in MST programmes are mostly uniform, there are also some programme-specific disciplines. These are educator, medical assistant and occupational therapist. The profession of 'educator' is found in the Arhus, Geneva, Padova, Bergamo and Paris programmes. Despite the role of educator varying from programme to programme, its general function is to provide support and advice to the patient on social and vocational matters. In the United Kingdom, the occupational therapist performs a similar function, assisting the patient to reintegrate into society. The 'medical assistant' exists only in the Geneva programme. Training for this discipline involves a two year full-time or three year part-time course in all matters related to assisting the medical doctor. These can range from administrative duties to laboratory work. In Switzerland, this discipline is reported to be more common than nursing.

Although all the programmes allocate a 'keyworker' to each patient, the role of the keyworker may vary from one centre to another. While in some programmes (e.g., Essen) the 'keyworker' is the doctor in charge of the case, in others (e.g., London), another member of the multi-disciplinary team serves this purpose.

Monitoring and Evaluation

Monitoring, evaluation, audit and quality assurance activities differ. Most of the activities focus on process, rather than outcome. While some programmes have explicit policies and practices, including regular meetings, others do not.

Treatment Practices

- Screening

Although all patients in treatment submit urine samples for screening, the number of samples required varies across programmes. Also, there is no agreement on whether urine samples should be provided under supervision. Generally, the average number of urine specimens (mostly supervised) taken each month from individuals ranges between 2 to 12.

Waiting Time

Waiting time between referral and assessment varies. This variation is linked to the differences in allocated resources (i.e., staffing numbers) and the extent of catchment area responsibility. For instance, a crude estimate of staff/catchment population ratio for the London programme is 1: 13,665 compared to 1: 68,182 in the Oporto programme. This shows a ratio difference of 0.2:1 between the London and Oporto programmes.

Contents

Overall the contents of MST appear to vary across programmes. The cluster is not agreed on the following: assessment instruments; criteria for treatment type allocation (i.e., MDT or MMT); duration of MDT; frequency of mandatory programme attendance; dosage limits; models of counselling; and the elements of support services. Also, there is no consensus on the issue of provision of injecting equipment.

* Supervision generally involves the patient having to urinate with a member of staff observing. The majority of centres which demand this approach have specifically designed toilet facilities with a two way mirror in situ.

Integrated descriptive matrices revealed two distinct categories of MST programmes in the cluster: standard and enhanced. Table 3 defines the contents of each type and the number of programmes so classified.

Table 3 Programme Category by Centre

Programme Category	Description	Number of Programmes in the cluster.
Standard	Methadone + regular counselling + onsite medical/psychiatric care + family therapy	4
Enhanced	Standard Programme + employment/vocational counselling + other support services	7

Chapter 16 Measuring quality in MST programmes

A Oyefeso, C Clancy & AH Ghodse

Introduction

There are increasing concerns about the cost and effectiveness of Methadone Substitution Therapy (MST). The high attrition rates in some programmes and the possibilities that the intensity of methadone programmes may be inadequate in meeting patients' needs are specific areas of concern. Commissioners of health care and other funding agencies need ways to monitor the performance of MST programmes in order to ensure that appropriate care is being delivered, and there is increasing demand for high quality services by purchasers.

To ensure their continued existence, therefore, it is essential for MST programmes to monitor and demonstrate the quality of the services they provide. This calls for the development of valid criteria for measuring quality. Donabedian (1980) formulated a model for evaluating quality through the analysis of structure, process and outcome. *Structure* refers to the physical organisational and infrastructural resources of MST programmes. *Process* and *content* describe how overall care is delivered to the patients. *Outcomes* refer to the results of the care provided in MST programmes. Using this model a quality programme would be one whose structure, process and content produce desirable outcomes.

This formulation then leads to two critical quality concepts that are fundamental to health care programmes in general, and to MST programmes in particular. These are quality of care (QoC) and quality of life (QoL). A programme that provides good QoC should, therefore, lead to improvement in QoL for the patients.

Measuring Quality of Care

As discussed in the previous chapter, MST programmes vary in structure and process. Consequently, there are no agreed valid quality criteria. The first step towards QoC monitoring, therefore, is the development of valid criteria, which can be described by their referents, i.e., conditions, problems, diagnoses or treatment for which the criteria were developed (Fauman,1989). For MST programmes, the relevant criteria are treatment-referenced. A good system of quality monitoring must use empirically derived criteria and must lead to the specification of a standard - quantified level of acceptable practice (Donabedian, 1986).

In a related study on MST (Oyefeso et al, 1998), the development of a treatment-referenced, empirically derived quality criteria has been illustrated. Three criteria for out-patient MST programmes were developed. These are 'Drug Use Hygiene', 'Sharing of Injecting Equipment' and 'Partner's Drug Use Status'. Oyefeso et al (1998) proposed that QoC in MST programmes can be measured by the extent to which the patients used drugs in a hygienic fashion. Using this criterion, a quality programme for injecting drug users should ensure reduction in (i) frequency of injecting drug use; (ii) use of injecting equipment more than once; and (iii) increase in the frequency of sterilised equipment.

The second criterion ensures reduction in the frequency of use of injecting equipment after someone else and in allowing others to use one's equipment after own use. The third criterion, which applies to both injecting and non-injecting drug users, focuses on the patient's partner and helps evaluate the extent to which treatment gains have positive effects on the partner's use of illicit drugs, whether or not by injection (Appendix 1).

Through repeated cross-sectional surveys of the patient population, a programme can identify the extent of its QoC using any of the three criteria alone or in combination. Standards can then be specified by identifying the proportion of the patient population that satisfies the quality criteria.

Measuring Quality of Life

In addition to concerns expressed by purchasers and commissioners of MST programmes about the quality of these programmes, there is increasing focus on the outcome of the treatment offered by these programmes. One important measure of outcome in health care, which has not been given sufficient attention when evaluating care for substance misusers, is health-related quality of life (QoL). This is evident in the fact that most QoL measures are generic in nature with little evaluation of their suitability for monitoring outcomes in the population of addicts.

With increasing demands for evidence-based outcome of health programmes, the development of QoL measures that are sensitive to the needs of addicts has become imperative. QoL is becoming increasingly recognised as a useful criterion for evaluating treatment outcome, especially because of its ability to incorporate patients' perspectives into the evaluation process.

Measuring QoL in patients undertaking MST programmes can serve numerous functions. Firstly, it would facilitate the assessment of the net overall impact of MST programme on illicit drug use and related conditions. Secondly, it would provide the opportunity to compare the relative effectiveness of MST with other modalities for treating opiate addiction. Such an exercise will permit the evaluation of cost effectiveness of MST for opiate addicts in different settings. Improvement in quality of life and the optimal duration of change can then be used to demonstrate the need for resource allocation.

A preliminary study was undertaken to develop a drug abuse-related QoL measure that was specific to opiate addicts receiving methadone treatment. A sample of 99 consecutively consenting opiate dependent patients were recruited from the London ECCAS Centre's out-patient MST programme. About 68% of the sample were males, with an average age of 34 years (SD = 7). Psychometric testing yielded addiction-specific QoL indicators – sleep status, appetite, pending court case and employment status. The four-item scale was called the Brief Addiction Recovery Status Scale (BARSS). The composite score on the four-item instrument gives an addiction-specific QoL measure.

The BARSS correctly discriminated between patients who were new to treatment and those who had been in treatment for 6 or more months. It also correlated significantly with the following addiction-related variables: self-reported and clinicians' rating of patients' drug, mental health and physical health problems (Appendix 2). Further validation studies of this instrument in other European Centres are currently being undertaken.

Measures of quality that are specific to MST programmes, are short, user-friendly, reliable and valid, have been developed. These instruments also provide the framework for developing more comprehensive measures of quality where indicated. Their utility in follow-up studies, however, is yet to be determined.

Chapter 17 Collaboration in addiction studies across Europe and future research agendas

AH Ghodse, C Clancy & A Oyefeso

Introduction

The main research agenda for methadone substitution therapy (MST) programmes is the evaluation of their effectiveness. Determining the effectiveness of MST, however, calls for further understanding of the needs of the population of problematic opiate users and their response to MST. Studies of clinical populations are usually considered under three dimensions – etiology, pattern of occurrence of a condition (distribution) and sequelae. In setting a future research agenda across Europe, this chapter will examine how these three dimensions impact on the patient, the community and the functioning of MST programmes.

Vulnerabilities

If the causes of a particular condition are known, appropriate intervention is focused at preventing or eliminating the causes. As there are many pathways to illicit drug use, it is often difficult to isolate the definitive causes of these conditions. Hence, researchers in this area have often described etiology in terms of major risk factors or vulnerabilities. Among users of MST programmes in Europe, studies of vulnerabilities and how they are determined by cultural factors are important.

The factors that predispose programme users to addiction are often the same that determine poor treatment compliance and relapse. Studies of the presence, recency and intensity of individual vulnerabilities to treatment non-compliance and relapse should provide relevant information for fine tuning programme content in order to promote overall patient engagement and improved outcome.

Where social factors, such as unemployment, criminality, and homelessness are implicated in non-compliance and relapse, research collaboration between the health and social sectors nationally and transnationally should prove useful for the development of partnership in care for MST programme users and other illicit drug users. Research priorities should include the identification of discriminating factors between treatment-compliant and non-compliant patients; development of a patient risk profile for relapse; and identification of programme characteristics as well as social, economic and cultural factors that hinder compliance and promote relapse. Research collaboration across Europe will help differentiate culture-specific and universal vulnerabilities to treatment non-compliance and relapse.

Pattern of Presentation

A large proportion of MST programme users often present with co-morbid psychiatric conditions, suggesting that this population is not homogeneous. The common psychiatric conditions in this population include personality disorders, depression, and sleep disorders. The nature of the co-occurrence of some of these disorders, however, is unclear.

There are three often reported broad patterns. Firstly, problematic opiate use can be a consequence of an underlying psychiatric condition. Secondly, a psychiatric condition can be a consequence of substance use disorder. Thirdly, opiate dependence and a psychiatric disorder can occur simultaneously in one of the following patterns – (i) absence of an overlap in both conditions in onset and course (ii) both conditions can be chronic with unspecified onsets and overlapping courses; (iii) the psychiatric condition may have an earlier onset but both conditions have independent courses; and (iv) substance use disorder may have an earlier onset but both conditions have independent courses.

This complexity in the pattern of presentation of opiate dependence (and other substance use disorders) along side psychiatric disorders calls for further understanding of not only the nature of the co-occurrence of these disorders, but also how they impact on programme planning and effectiveness. The outcome of such studies should provide a clearer framework for appropriate treatment matching, thus enhancing therapeutic efforts and decreasing the risk of relapse.

Sequelae

In addition to psychiatric and psychological sequelae, users of MST programmes often present with a variety of medical complications that collectively result in high risk of premature mortality and low life expectancy. In addition to HIV/AIDS, hepatitis C has now emerged as one of the most prevalent blood-borne health consequences of addiction. There is, therefore, a need for a comprehensive risk identification programme as part of a general health improvement programme among users of MST programmes and other substance abuser populations. Pertinent research questions may include:

(i) Identification of sociocultural risk factors for hepatitis B and C transmission
(ii) Examination of the structure and process of hepatitis B vaccination programmes in the EU; and identification of predictors of uptake of these services in opiate addicts
(iii) Identification of significant predictors of premature death among opiate addicts across the EU

Programme relevance and appropriateness

Developing a research portfolio for better understanding of the population of MST programme users should exist alongside with the examination of the relevance, and appropriateness of MST programmes. Ultimately, an effective MST programme is one that can guarantee improvement in the quality of life and overall functioning of its patients. Programme-based research should aim to address the following questions:

- Profile of patients that benefit from MST.
- Programmatic factors that impede treatment compliance and predict attrition rates.
- Medium and long-term benefits of MST
- Aftercare programmes best suited to MST programme users
- Functional relationship between quality of care provided and treatment response.

Framework for Research

A feasible research agenda in MST programmes across Europe calls for strong collaboration between treatment centres. The enduring existence of the European Collaboration Centres in Addiction Studies (ECCAS) is evidence that transnational collaboration in addiction research in Europe is possible, in spite of differences in language, culture, policies and legislation. However, individual centres need to strengthen research capabilities to ensure strong collaboration. Appropriate training of clinicians in various research methodologies as well as effective supervision are fundamental requirements for evidence-based clinical practice. Secondly, having dedicated researchers (clinical or non-clinical) work alongside clinicians increases the chances of a sustainable research framework. Thirdly, research projects should be timely and focused, with clear start and endpoints. Finally, at the policy level, research activities in the different centres should be seen as part of service provision, rather than as a separate agenda, given that its findings should inform the development and fine tuning of programme policies and practices.

Developing a framework for research should include should include consideration for continuous funding, which can be generated internally and/or externally. Internal funding takes the form of resources being allocated to research activities by the agency itself. External sources of funding should be sought, however, to strengthen the agency's research resources and engender a broader public commitment to addiction research. To improve the chances of successful external funding, individual agency's should demonstrate the following:

- Capability to undertake research through existing research structure and appropriate staffing.
- Track record of research in the area specified by the funding bodies.
- Relevance of potential outcomes of the proposed research in addressing local, national and international policies and practices.
- Ability to engage in active collaboration with other agencies, nationally and transnationally.
- Track record of dissemination of research outcomes in peer-reviewed publications.

Conclusion

It is essential for addiction agencies across Europe to promote addiction research outside of the direct field of substance misuse. The opportunity for addiction research specialists to collaborate with researchers in other specialities, which are related to addiction and its consequences e.g. cardiology, oncology, immunology, etc should be promoted. Opening communication channels with social and criminal justice agencies should also be encouraged, as this extends the scope of research questions to be addressed and methodology on offer. Addiction by its very nature is multifaceted thus demanding a broad research framework. The challenge for the speciality is to develop effective, pragmatic and sustainable research perspectives.

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Appendix 1: Quality of Care Index 1 (QCI-1)

	In the last month	Scoring
	Hygiene criterion	
1.	Have you taken illicit drugs by injecting?	Yes = 1 No = 2
2.	Have you used injecting equipment more than once?	Yes = 1 No = 2
3.	Have you sterilised your injecting equipment before or after use?	Yes = 2 No = 1
	Sharing criterion	
4.	Have you used injecting equipment after someone else?	Yes = 1 No = 2
5.	Have you allowed others to use injecting equipment after you?	Yes = 1 No = *2*
	Partner's Drug Use Status criterion	
6.	Does your regular partner use illicit drugs?	Yes = 1 No =2
7.	Does your regular partner inject drugs?	Yes = 1 No = 2

Source: Oyefeso A, Clancy C & Ghodse H (1998) 'Developing a Quality of Care Index'. *Journal of Evaluation in Clinical Practice*. 4, 39-47.

Appendix 2: 2.1 Brief Addiction Recovery Status Scale

	Indicator *(Please consider your situation in the last month)*	Scoring	
1.	Are you currently employed?	Yes = 2	No = 1
2.	Do you at present have any court cases pending?	Yes = 1	No = 2
3.	What is your appetite like?	Good = 2	Poor = 1
4.	How do you sleep?	Well = 2	Poorly = 1

2.2 Differences in BARSS scores between Old and New Patients Undertaking Methadone Treatment

	N	Mean score	SD	t	p
Old patients	43	6.58	1.00	1.94	0.05
New patients	39	6.15	0.99		

2.3 One-way analysis of variance summary table of the influence of self-reported severity of drug problem (mild, moderate, severe) on BARSS scores

Source	Df	Sum of squares	Mean squares	F ratio	p
Between groups	2	21.6	10.8	12.9	0.0001
Within groups	69	57.9	0.8		
Total	71	79.5			

2.4 One-way analysis of variance summary table of the influence of clinician's impression of severity of drug problem (mild, moderate, severe) on BARSS scores

Source	df	Sum of squares	Mean squares	F ratio	p
Between Groups	2	14.9	7.4	8.09	0.001
Within Groups	68	62.6	0.9		
Total	70	77.5			

2.5 One-way analysis of variance summary table of the influence of self-reported severity of mental health problems (mild, moderate, severe) on BARSS scores

Source	Df	Sum of squares	Mean squares	F ratio	p
Between Groups	2	21.7	10.9	13.3	0.0001
Within Groups	71	58.1	0.8		
Total	73	79.8			

2.6 One-way analysis of variance summary table of the influence of clinician's impression of mental health problems (mild, moderate, severe) on BARSS scores

Source	Df	Sum of squares	Mean squares	F ratio	p
Between Groups	2	20.2	10.1	12.3	0.0001
Within Groups	70	57.6	0.8		
Total	72	77.8			

2.7 One-way analysis of variance summary table of the influence of self-reported severity of physical health problems (mild, moderate, severe) on BARSS scores

Source	Df	Sum of squares	Mean squares	F ratio	p
Between groups	2	14.3	7.2	7.7	0.001
Within groups	71	65.5	0.9		
Total	73	79.8			

2.8 One-way analysis of variance summary table of the influence of clinician's impression of physical health problem (mild, moderate, severe) on BARSS scores

Source	Df	Sum of squares	Mean squares	F ratio	p
Between groups	2	4.1	2.0	1.9	0.16
Within groups	67	73.1	1.1		
Total	69	77.2			

Appendix 3: Overview profile of MST Programmes Profiles Across Centres

Centre	Type of MST	No of places	Centre's Budget £ UK	No of Clinical Staff	Discipline of Programme Director	Treatment Settings	Daily Dose Range	Dispensing Sites	Permission to Prescribe is Needed*
Arhus, Denmark	Detoxification	No limit	3,870,000	24	Psychology	Out-patients Community	20-60 mgs	Community pharmacy	Yes
Ringkobing, Denmark	Maintenance	No limit	1,150,000	Not given	Psychology	Out-patients Community	20-120 mgs	Community pharmacy	Yes
Paris, France	Maintenance	70	1,580,000	35	Psychiatry	Out-patients	15-100 mgs	Centre only	No
Essen, Germany	Detoxification Maintenance	No limit	Not available	4	Psychiatry	Out-patients In-patients	10-250 mgs	Centre only	Yes
Dublin, Ireland	Detoxification Maintenance	No limit	892,857	23	Psychiatry	Multiple	20-80 mgs	Centre only	No
Padova, Italy	Detoxification Maintenance	No limit	Not available	25	Psychiatry	Out-patients Community Day programme	25-140 mgs	Centre only	No
Bergamo, Italy	Detoxification Maintenance	No limit	Not available	34	Psychiatry	Out-patients Community Day programme	0-130 mgs	Centre only	No
Oporto, Portugal	Detoxification Maintenance	900	647,112	30	Psychiatry	Out-patients Community	1 –120 mgs	Centre only	No
Barcelona, Spain	Maintenance	160	271,852	21	Psychiatry	Out-patients In-patients	20 mgs - no limit	Centre only	Yes
Oviedo, Spain	Maintenance	No limit	Not available	6	Psychiatry	Out-patients	35 mgs - no limit	Centre only	Yes
Geneva, Switzerland	Detoxification Maintenance	400	Not available	22	Psychiatry Psychology	Out-patients	1 –120 mgs	Centre & community pharmacy	Yes
London, UK	Detoxification Maintenance	No limit	3,400,000	59	Psychiatry	Out-patients In-patients Community Day programme	5 mgs - no limit	Centre & community pharmacy	No

* Centre must by law apply to a local governing body who will sanction the prescription of methadone for each individual case.


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